TOSHIBA

Leading Innovation

Satellite RADIUS™ 11 User's Guide

If you need assistance:

Technical support is available online at Toshiba's Web site at support.toshiba.com. At this Web site, you will find answers for many commonly asked technical questions plus many downloadable software drivers, BIOS updates, and other downloads.

For more information, see "If Something Goes Wrong" on page 109 in this guide.

GMAD00408011
11/14

California Prop 65 Warning

⚠ WARNING This product contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. ***Wash hands after handling***.

BC For the state of California only.

Model: Satellite®/Satellite Pro® L10W-B Series

Recordable and/or ReWritable Drive(s) and Associated Software Warranty

The computer system you purchased may include Recordable and/or ReWritable optical disc drive(s) and associated software, among the most advanced data storage technologies available. As with any new technology, you must read and follow all set-up and usage instructions in the applicable user guides and/or manuals enclosed or provided electronically. If you fail to do so, this product may not function properly and you may lose data or suffer other damage. **TOSHIBA AMERICA INFORMATION SYSTEMS, INC. ("TOSHIBA"), ITS AFFILIATES AND SUPPLIERS DO NOT WARRANT THAT OPERATION OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR FREE. YOU AGREE THAT TOSHIBA, ITS AFFILIATES AND SUPPLIERS SHALL HAVE NO RESPONSIBILITY FOR DAMAGE TO OR LOSS OF ANY BUSINESS, PROFITS, PROGRAMS, DATA, NETWORK SYSTEMS OR REMOVABLE STORAGE MEDIA ARISING OUT OF OR RESULTING FROM THE USE OF THE PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.**

Protection of Stored Data

For your important data, please make periodic back-up copies of all the data stored on the hard disk or other storage devices as a precaution against possible failures, alteration, or loss of the data. IF **YOUR DATA IS ALTERED OR LOST DUE TO ANY TROUBLE, FAILURE OR MALFUNCTION OF THE HARD DISK DRIVE OR OTHER STORAGE DEVICES AND THE DATA CANNOT BE RECOVERED, TOSHIBA SHALL NOT BE LIABLE FOR ANY DAMAGE OR LOSS OF DATA, OR ANY OTHER DAMAGE RESULTING THEREFROM. WHEN COPYING OR TRANSFERRING YOUR DATA, PLEASE BE SURE TO CONFIRM WHETHER THE DATA HAS BEEN SUCCESSFULLY COPIED OR TRANSFERRED. TOSHIBA DISCLAIMS ANY LIABILITY FOR THE FAILURE TO COPY OR TRANSFER THE DATA CORRECTLY.**

Critical Applications

The computer you have purchased is not designed for any "critical applications." "Critical applications" means life support systems, medical applications, connections to implanted medical devices, commercial transportation, nuclear facilities or systems or any other applications where product failure could lead to injury to persons or loss of life or catastrophic property damage. **ACCORDINGLY, TOSHIBA, ITS AFFILIATES AND SUPPLIERS DISCLAIM ANY AND ALL LIABILITY ARISING OUT OF THE USE OF THE COMPUTER PRODUCTS IN ANY CRITICAL APPLICATIONS. IF YOU USE THE COMPUTER PRODUCTS IN A CRITICAL APPLICATION, YOU, AND NOT TOSHIBA, ASSUME FULL RESPONSIBILITY FOR SUCH USE.**

FCC Notice "Declaration of Conformity Information"

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE Only Peripherals complying with the FCC Class B limits may be attached to this equipment. Operation with noncompliant peripherals or peripherals not recommended by Toshiba is likely to result in interference to radio and TV reception. Shielded cables must be used between the external devices and the computer's ports. Changes or modifications made to this equipment not expressly approved by Toshiba or parties authorized by Toshiba could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Contact Toshiba's Support Web site at support.toshiba.com.

Bluetooth® Wireless Technology Interoperability

NOTE This section is only applicable if your system has a *Bluetooth*® module.

Bluetooth® modules are designed to be interoperable with any product with *Bluetooth* wireless technology that is based on Frequency Hopping Spread Spectrum (FHSS) radio technology, and is compliant to:

- *Bluetooth* Specification as defined and approved by The *Bluetooth* Special Interest Group.
- Logo certification with *Bluetooth* wireless technology as defined by The *Bluetooth* Special Interest Group.

CAUTION *Bluetooth* modules enable wireless networks over two or more (up to a total of seven) TOSHIBA portable devices. Please contact TOSHIBA computer product support on Web site http://www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or support.toshiba.com in the United States for more information.

When you use a *Bluetooth* module close to 2.4 GHz Wireless LAN devices, *Bluetooth* transmissions might slow down or cause errors. If you detect certain interference while you use a *Bluetooth* device, always change the frequency, move your device to the area outside of the interference range of 2.4 GHz Wireless LAN devices (40 meters/43.74 yards or more) or stop transmitting from your device. Please contact TOSHIBA computer product support on Web site http://www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or support.toshiba.com in the United States for more information.

Bluetooth and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use *Bluetooth* and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection. If you should experience any such problem, immediately turn off either one of your *Bluetooth* or Wireless LAN. Please contact Toshiba computer product support on Web site http://www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or support.toshiba.com in the United States for more information.

Bluetooth® Wireless Technology and Your Health

The products with *Bluetooth*® wireless technology, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by devices with *Bluetooth* wireless technology however is much less than the electromagnetic energy emitted by wireless devices such as mobile phones.

Because products with *Bluetooth* wireless technology operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes *Bluetooth* wireless technology is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of *Bluetooth* wireless technology may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- Using the equipment with *Bluetooth* wireless technology on board airplanes, or
- In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the device with *Bluetooth* wireless technology prior to turning on the equipment.

CAUTION Exposure to Radio Frequency Radiation

The radiated output power of the Bluetooth module is far below the FCC radio frequency exposure limits. Nevertheless, the Bluetooth module shall be used in such a manner that the potential for human contact during normal operation is minimized.

Wireless Interoperability

Wireless LAN products are designed to be interoperable with any wireless LAN product that is based on Direct Sequence Spread Spectrum (DSSS) radio technology, and is compliant to:

- The IEEE 802.11 Standard on Wireless LANs (Revision a/b/g/n/ac), as defined and approved by the Institute of Electrical and Electronics Engineers.
- The Wireless Fidelity (Wi-Fi®) certification as defined by the Wi-Fi Alliance. The "Wi-Fi CERTIFIED" logo is a certification mark of the Wi-Fi Alliance.

CAUTION *Bluetooth*® and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use *Bluetooth* and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off your *Bluetooth* or Wireless LAN device.

Please contact Toshiba computer product support on Web site http://www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or support.toshiba.com in the United States for more information.

CAUTION Radio Frequency Interference Requirements

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.25 GHz frequency range. FCC requires this product to be used indoors for frequency range 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

Please note that high-power radars are allocated as primary users of the 5.25 GHz to 5.35 GHz and 5.65 GHz to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

NOTE The above caution applies to products that operate with an 802.11a radio device.

Wireless LAN and Your Health

Wireless LAN products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless LAN devices however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- Using the Wireless LAN equipment on board airplanes, or
- In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

CAUTION Exposure to Radio Frequency Radiation

The radiated output power of the Wireless LAN is far below the FCC radio frequency exposure limits. Nevertheless, the Wireless LAN shall be used in such a manner that the potential for human contact during normal operation is minimized. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Canada – Industry Canada (IC)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conformé à la norme NMB-003 du Canada.

This device complies with RSS 210 of Industry Canada.

CAUTION The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site www.hc-sc.gc.ca/rpb. The RF device shall not be co-located with any other transmitter that has not been tested with this device.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

L' utilisation de ce dispositif est soumis aux deux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même s'il est susceptible de compromettre son fonctionnement.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empecher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit etre utilize a l'interieur et devrait etre place loin des fenetres afin de Fournier un ecram de blindage maximal. Si le matriel (ou son antenne d'emission) est installe a l'exterieur, il doit faire l'objet d'une licence.

CAUTION This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.25 GHz frequency range. Industry Canada requires this product to be used indoors for frequency range 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

Please note that high-power radars are allocated as primary users of the 5.25 GHz to 5.35 GHz and 5.65 GHz to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Veuillez noter que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

NOTE The above caution applies to products that operate with an 802.11a radio device.

Regulatory statements

This product complies with any mandatory product specification in any country/region where the product is sold. In addition, the product complies with the following:

EU Declaration of Conformity

TOSHIBA declares that this product conforms to the following Standards:

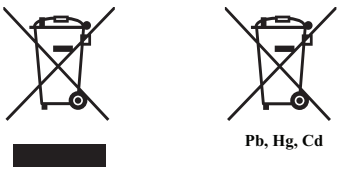
CE

Supplementary Information: *The product complies with the requirements of the Low Voltage Directive 73/23/EEC, the EMC Directive 89/336/EEC and/or the R&TTE Directive 1999/5/EC, compatible with the RoHS Directive 2011/65/EU and the Eco Design Directive 2009/125/EC (ErP) and the related implementing measures.

This product is carrying the CE-Mark in accordance with the related European Directives. The party responsible for CE-Marking is TOSHIBA Europe GmbH, Hammfelddamm 8, 41460 Neuss, Germany.

The European Union WEEE (Waste from Electrical and Electronic Equipment) Directive Information

The European Union WEEE (Waste from Electrical and Electronic Equipment) Directive is intended to protect the quality of the environment and human health through the responsible use of natural resources and the adoption of waste management strategies that focus on recycling and reuse. This Directive requires producers of electrical and electronic products put on the market in European Union (EU) member countries after August 2005 to mark such products with a crossed-out wheeled bin with a black bar symbol. If the product's battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the Battery Directive (2006/66/EC), then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will appear below the crossed out wheeled bin symbol on the battery.



In the European Union, these symbols indicate that when the last end user wishes to discard this product, it must be sent to appropriate facilities for recovery and recycling. This Directive applies to EU member countries only and does not apply to end users in other countries such as the United States.

Although the initial emphasis is in Europe, Toshiba is already working with design engineers, suppliers, and other partners to determine appropriate worldwide product life cycle planning and end-of-life strategies for our products. Please contact your local government for applicable laws and regulations governing the disposal of this product. For information on how to trade-in or recycle your product, visit www.reuse.toshiba.com.

Europe - Restrictions for use of 2.4 GHz Frequencies in European Community Countries

België/ Belgique:	For private usage outside buildings across public grounds over less than 300m no special registration with IBPT/BIPT is required. Registration to IBPT/BIPT is required for private usage outside buildings across public grounds over more than 300m. For registration and license please contact IBPT/BIPT.
	Voor privé-gebruik buiten gebouw over publieke groud over afstand kleiner dan 300m geen registratie bij BIPT/IBPT nodig; voor gebruik over afstand groter dan 300m is wel registratie bij BIPT/IBPT nodig. Voor registratie of licentie kunt u contact opnemen met BIPT.
	Dans le cas d'une utilisation privée, à l'extérieur d'un bâtiment, au-dessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprès de l'IBPT est requise. Pour les enregistrements et licences, veuillez contacter l'IBPT.
Deutschland:	License required for outdoor installations. Check with reseller for procedure to follow.
	Anmeldung im Outdoor-Bereich notwendig, aber nicht genehmigungspflichtig. Bitte mit Händler die Vorgehensweise abstimmen.
France:	Restricted frequency band: only channels 1 to 7 (2400 MHz and 2454 MHz respectively) may be used outdoors in France. Please contact A.R.T. (http://www.art-telecom.fr) for applicable procedures to follow.
	Bande de fréquence restreinte: seuls les canaux 1- 7 (2400 et 2454 MHz respectivement) doivent être utilisés endroits extérieur en France. Vous pouvez contacter l'Autorité de Régulation des Télécommunications (http://www.art-telecom.fr) pour la procédure à suivre.
Italia:	License required for indoor use. Use with outdoor installations not allowed.
	È necessaria la concessione ministeriale anche per l'uso interno. Verificare con i rivenditori la procedura da seguire.
Nederland:	License required for outdoor installations. Check with reseller for procedure to follow.
	Licentie verplicht voor gebruik met buitenantennes. Neem contact op met verkoper voor juiste procedure.

Europe - Restrictions for Use of 5 GHz Frequencies in European Community Countries

European Community Countries	5150-5250 MHz Channels: 36, 40, 44, 48 Indoor Only	5250-5350 MHz Channels: 52, 56, 60, 64 Indoor Only	5470-5725 MHz Channels: 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140 Indoor/Outdoor
Austria	O	x	x
Belgium, France, Switzerland/ Liechtenstein	O	O	x
Denmark, Finland, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, UK	O	O	O
Iceland, Spain	O	O	O

O: allowed x: forbidden

- To remain in conformance with European spectrum usage laws for Wireless LAN operation, the above 2.4 GHz and 5 GHz channel limitations apply. The user should use the wireless LAN utility to check the current channel of operation. If operation is occurring outside of the allowable frequencies as listed above, the user must cease operating the Wireless LAN at that location and consult the local technical support staff responsible for the wireless network.
- The 5 GHz Turbo mode feature is not allowed for operation in any European Community country.
- This device must not be operated in ad-hoc mode using channels in the 5 GHz bands in the European Community. Ad-hoc mode provides a direct communication between two client devices without a Wireless LAN Access Point.
- This device must be used with Access Points that have employed and activated a radar detection feature required for European Community operation in the 5 GHz bands. This device will operate under the control of the Access Point in order to avoid operating on a channel occupied by any radar system in the area. The presence of nearby radar operation may result in temporary interruption of operation of this device.

The Access Point's radar detection feature will automatically restart operation on a channel free of radar. You may consult with the local technical support staff responsible for the wireless network to ensure the Access Point device(s) are properly configured for European Community operation.

Taiwan

Article 14	Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design.
Article 17	Any use of low power radio frequency electric machinery shall not affect aviation safety and interfere with legal communications. In the event interference is caused, the use of such electric machinery shall be immediately discontinued. Operation of such products can be resumed only when they are modified and can no longer cause interference.

The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.

Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery.

Using this Equipment in Japan

In Japan, the frequency bandwidth of 2,400 MHz to 2,483.5 MHz for second generation low-power data communication systems such as this equipment overlaps that of mobile object identification systems (premises radio station and specified low-power radio station).

1. Sticker

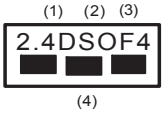
Please put the following sticker on devices incorporating this product.

The frequency bandwidth of this equipment may operate within the same range as industrial devices, scientific devices, medical devices, microwave ovens, licensed radio stations and non-licensed specified low-power radio stations for mobile object identification systems (RFID) used in factory product lines (Other Radio Stations).

1. Before using this equipment, ensure that it does not interfere with any of the equipment listed above.
2. If this equipment causes RF interference to other radio stations, promptly change the frequency being used, change the location of use, or turn off the source of emissions.
3. Contact TOSHIBA Direct PC if you have problems with interference caused by this product to Other Radio Stations.

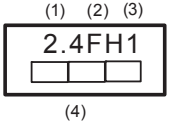
2. Indication

The indication shown below appears on this equipment.



1 2.4: This equipment uses a frequency of 2.4 GHz.
2 DS: This equipment uses DS-SS modulation.
OF: This equipment uses OFDM modulation.
3 The interference range of this equipment is less than 40m.
4 ■ ■ ■ This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz.
It is possible to avoid the band of mobile object identification systems.

The indication shown below appears on this equipment.



1 2.4: This equipment uses a frequency of 2.4 GHz.
2 FH: This equipment uses FH-SS modulation.
3 The interference range of this equipment is less than 10m.
4 This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz.

3. TOSHIBA Direct PC

Monday – Friday: 10:00 – 17:00

Toll Free Tel: 0120-15-1048

Direct Dial: 03-3457-4850

Fax: 03-3457-4868

VCCI Class B Information

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Device Authorization

This device obtains the Technical Regulation Conformity Certification and the Technical Conditions Compliance Approval, and it belongs to the device class of radio equipment of low-power data communication system radio station stipulated in the Radio Law and the Telecommunications Business Law of Japan.

Copyright

This guide is copyrighted by Toshiba America Information Systems, Inc. with all rights reserved. Under the copyright laws, this guide cannot be reproduced in any form without the prior written permission of Toshiba. No patent liability is assumed, however, with respect to the use of the information contained herein.

©2014 by Toshiba America Information Systems, Inc. All rights reserved.

Export Administration Regulation

This document contains technical data that may be controlled under the U.S. Export Administration Regulations, and may be subject to the approval of the U.S. Department of Commerce prior to export. Any export, directly or indirectly, in contravention of the U.S. Export Administration Regulations is prohibited.

Notice

The information contained in this manual, including but not limited to any product specifications, is subject to change without notice.

TOSHIBA CORPORATION AND TOSHIBA AMERICA INFORMATION SYSTEMS, INC. (TOSHIBA) PROVIDES NO WARRANTY WITH REGARD TO THIS MANUAL OR ANY OTHER INFORMATION CONTAINED HEREIN AND HEREBY EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH REGARD TO ANY OF THE FOREGOING. TOSHIBA ASSUMES NO LIABILITY FOR ANY DAMAGES INCURRED DIRECTLY OR INDIRECTLY FROM ANY TECHNICAL OR TYPOGRAPHICAL ERRORS OR OMISSIONS CONTAINED HEREIN OR FOR DISCREPANCIES BETWEEN THE PRODUCT AND THE MANUAL. IN NO EVENT SHALL TOSHIBA BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, OR EXEMPLARY DAMAGES, WHETHER BASED ON TORT, CONTRACT OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS MANUAL OR ANY OTHER INFORMATION CONTAINED HEREIN OR THE USE THEREOF.

Trademarks

Satellite, Satellite Pro, Satellite Radius, and eco Utility are either registered trademarks or trademarks of Toshiba America Information Systems, Inc. and/or Toshiba Corporation.

Adobe and Photoshop are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Toshiba is under license. Other trademarks and trade names are those of their respective owners.

U.S. patents apply to this product. See http://patents.dts.com. Manufactured under license from DTS Licensing Limited. DTS, the Symbol, & DTS and the Symbol together are registered trademarks and DTS Premium Voice Pro is a trademark of DTS, Inc. ©DTS, Inc. All Rights Reserved.

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Intel, Intel Core, Celeron, Centrino and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Microsoft, Outlook, Windows, and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

MultiMediaCard and MMC are registered trademarks of MultiMediaCard Association.

Secure Digital, microSD, and SD are trademarks or registered trademarks of SD-3C, LLC in the United States, other countries or both.

Wi-Fi® is a registered trademark of the Wi-Fi Alliance®.

All other brand and product names are trademarks or registered trademarks of their respective companies.

Licenses

This Product is licensed under the AVC, the VC-1 and the MPEG-4 Part 2 Visual patent portfolio licenses for the personal and non-commercial use of a consumer to (i) encode video in compliance with the above standards ("Video Standards") and/or (ii) decode AVC, VC-1 and MPEG-4 Part 2 Visual that was encoded by a consumer engaged in personal and non-commercial activity or was obtained from a video provider licensed to provide such video. None of the licenses extend to any other product regardless of whether such product is included with this product in a single article. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, LLC. See www.mpegla.com.

Computer Recycling Information

As part of a commitment to people and the future, Toshiba promotes the efficient use of resources by working to achieve our zero-waste-to-landfill goal at all our production sites. In addition to our existing waste reduction and recycling policies, Toshiba is strongly committed to reducing electronic waste. In order to ensure efficient use of resources and appropriate treatment of hazardous substances, in accordance with recycling regulations in each state, country, and territory, Toshiba wants to make it easy for customers to recycle products at the end of the life cycle. To learn more about Toshiba's sustainability commitment, visit toshiba.com/recycle.

Reuse, Donation, Recycling

Functional computers can be donated to a local charity or resold easily through a Toshiba-branded program.

Non working Toshiba computers can be mailed-back for free recycling.

For additional details, please visit toshiba.com/recycle.

Contents

Introduction.....24
This guide 26
Safety icons 27
Other icons used..... 27
Your computer's features and specifications 28
Documentation 28
Service options 28
Chapter 1: Getting Started.....29
Selecting a place to work 29
Setting up a work environment..... 29
Keeping yourself comfortable..... 30
Computer user comfort recommendations.... 30
Good Working Posture 30
Using the notebook with an external keyboard, mouse or monitor..... 31
Typing style..... 32
Taking breaks and varying tasks 33
Mobile computing tips 33
Transporting the notebook 33
Seeking additional help..... 34

Check list 34
Precautions 35
Important information on your computer's cooling fan 37
Setting up your computer 37
Connecting to a power source 38
Charging the main battery 39
Using the computer for the first time 40
Initial setup 40
Setting up your software 40
Registering your computer with Toshiba 41
To Shut down your computer 41
To Restart your computer 42
To place your computer in Sleep mode 43
Adding optional external devices 43
Adding memory 44
Recovering the Internal Storage Drive 44
Creating recovery media 45
Restoring from recovery media 48
Refresh your PC (with user's data) 49
Reset your PC 51
Installing drivers and applications 54
Using the touch pad 55
Adjusting touch pad settings 57
Disabling or enabling the touch pad 58
Connecting an external device 58
Using external display devices 59
Selecting video cables 59
Connecting an HDMI™-compatible television or display device 59
Directing the display output when you turn on the computer 60
Adjusting the quality of the external display 61
Customizing your computer's settings 61
Caring for your computer 61
Cleaning the computer 62
Moving the computer 62

Using a computer lock 62

Chapter 2: Learning the Basics 64

Computing tips 64
Display configuration modes 66
Screen Auto-rotation 67
Using the keyboard 67
Function keys 68
Special Windows® keys 68
Touch screen 68
Touch screen navigation 69
Mouse properties 70
Starting an app 70
Starting an app from the Start screen 71
Saving your work 71
Backing up your work 72
Toshiba's online resources 72

Chapter 3: Mobile Computing 73

Toshiba's energy-saver design 73
Running the computer on battery power 73
Battery Notice 74
Power management 75
Charging the main battery 75
Charging the RTC battery 76
Monitoring battery power 77
Determining remaining battery power 78
What to do when the main battery runs low 79
Setting battery notifications 79
Conserving battery power 80
Power Plans 81
Using the eco power plan 82
Changing the main battery 83
Taking care of your battery 83
Safety precautions 83
Maintaining your battery 84
Disposing of your computer 84
Traveling tips 84

Chapter 4: Exploring Your Computer's Features 86
Exploring the Start screen 86
Charms 87
Tiles 88
Exploring the desktop 88
Finding your way around the desktop 88
Windows® Store 90
Setting up for communications 91
Connecting your computer to a network 92
Exploring audio features 92
Recording sounds 92
Using external speakers or headphones 93
Using the Web Camera 94
Using the Memory card reader 94
Inserting memory media 95
Removing memory media 95
Chapter 5: Utilities 97
eco Utility® 98
Password Utility 99
Using a supervisor password 99
Using a user password 101
Deleting a user password 103
System Settings 104
Function Key 106
Recovery Media Creator 107
Service Station 107
TOSHIBA Application Installer 108
Chapter 6: If Something Goes Wrong 109
Problems that are easy to fix 109
Problems when you turn on the computer 110
The Windows® operating system is not working 112
Using Startup options to fix problems 113
Internet problems 115
The Windows® operating system can help you 116

Fixing a problem with Device Manager 116
Checking device properties 116
Power and the battery 117
Keyboard problems 119
Display problems 119
Disk or storage drive problems 121
Error-checking 121
Sound system problems 122
Printer problems 123
Wireless networking problems 124
Develop good computing habits 125
Data and system configuration backup in the Windows® operating system 126
If you need further assistance 130
Contacting Toshiba 131
Other Toshiba Internet Web sites 131
Toshiba's worldwide offices 132

Appendix A: TOSHIBA Function Keys 133
Functions 133
Help file 134
Display brightness 134
Output (Display switch) 135
Disabling or enabling the touch pad 136
Media buttons 136
Volume Mute 137
Disabling or enabling wireless devices 137

Appendix B: Power Cord/Cable Connectors 138

Glossary 139

Index 154

Introduction

Welcome to the world of powerful, portable, multimedia computing. With your Toshiba computer, your work and entertainment can accompany you wherever you go.

Your computer is ENERGY STAR® qualified.

Toshiba is a partner in the Environmental Protection Agency's (EPA) ENERGY STAR® Program and has designed this computer to meet the latest ENERGY STAR® guidelines for energy efficiency. Your computer ships with the power management options preset to a configuration that will provide the most stable operating environment and optimum system performance for both AC power and battery modes.

To conserve energy, your computer's power management features have been pre-configured to activate the display Sleep mode after no later than 15 minutes of inactivity; the system Sleep mode is activated after no later than 30 minutes of user inactivity. We recommend that you leave these and other energy saving features active, so that your computer will operate at its maximum energy efficiency. You can wake the computer from Sleep mode by pressing the power button. See the "Mobile Computing" section of the Toshiba User's Guide for more information on using power management settings to conserve computer energy.

When considering additions to your home office, purchase products that have earned the ENERGY STAR® for all your equipment needs, which can save you money, save energy, and help protect the climate.

Visit http://www.energystar.gov or http://www.energystar.gov/powermanagement for more information regarding the ENERGY STAR® Program.

NOTE This computer is compatible with European Union Directive 2011/65/EU, Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS), which restricts use of certain chemicals including, but not limited to, lead, cadmium, mercury, hexavalent chromium, PBB, and PBDE. Toshiba requires its computer component suppliers to meet RoHS requirements and verifies its suppliers' commitment to meeting RoHS requirements by conducting component sampling inspections during the product design approval process.

NOTE Certain Microsoft® software product(s) included with this computer may use technological measures for copy protection. IN SUCH EVENT, YOU WILL NOT BE ABLE TO USE THE PRODUCT IF YOU DO NOT FULLY COMPLY WITH THE PRODUCT ACTIVATION PROCEDURES. Product activation procedures and Microsoft's privacy policy will be detailed during initial launch of the product, or upon certain reinstallations of the software product(s) or reconfigurations of the computer, and may be completed by Internet or telephone (toll charges may apply).

Some software may differ from its retail version (if available), and may not include user manuals or all program functionality.

NOTE The product specifications and configuration information are designed for a product Series. Your particular model may not have all the features and specifications listed or illustrated. For more detailed information about the features and specifications on your particular model, please visit Toshiba's Web site at support.toshiba.com.

While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. For the most up-to-date product information about your computer, or to stay current with the various computer software or hardware options, visit Toshiba's Web site at support.toshiba.com.

This guide

This guide introduces the computer's features as well as some basic procedures needed to perform tasks in Windows 8.1.

You can:

- Read the entire guide from beginning to end.
- Skim through and stop when a topic interests you.
- Use the table of contents and the index to find specific information.

Safety icons

This manual contains safety instructions that must be observed to avoid potential hazards that could result in personal injuries, damage to your equipment, or loss of data. These safety cautions have been classified according to the seriousness of the risk, and icons highlight these instructions as follows:

⚠ DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in property damage.
NOTE	Provides important information.

Other icons used

Additional icons highlight other helpful or educational information:

	TECHNICAL NOTE: This icon indicates technical information about the computer.
	HINT: This icon indicates helpful hints and tips.
	DEFINITION: This icon indicates the definition of a term used in the text.

Your computer's features and specifications

Certain computer chassis are designed to accommodate all possible configurations for an entire product Series. Your select model may not have all the features and specifications corresponding to all of the icons or switches shown on the computer chassis, unless you have selected all those features.

This information applies to all the features and icons described in this guide.

Below are examples of some of the many possible icons used on your computer:

(Sample Illustration) System icons

Documentation

Your computer comes with the following documentation:

- An electronic version of the User's Guide (this document)
- A Quick Start document
- It may also include other documentation

For accessory information, visit Toshiba's Web site at accessories.toshiba.com.

Service options

Toshiba offers a full line of service programs to complement its standard limited warranty. Toshiba's standard limited warranty, extended warranty, and service upgrade terms and conditions are available at warranty.toshiba.com.

To stay current on the most recent software and hardware options for your computer, and for other product information, be sure to regularly check the Toshiba Web site at support.toshiba.com.

If you have a problem or need to contact Toshiba, see "If Something Goes Wrong" on page 109.

Chapter 1

Getting Started

This chapter provides tips for using your computer effectively, summarizes how to connect components, and explains what to do the first time you use your computer.

Please read the safety instruction information on the Quick Start document (that shipped with your computer) carefully and make sure you fully understand the instructions before you attempt to use your computer in order to avoid potential hazards that could cause bodily injury, property damage, or damage the computer.

Selecting a place to work

Your computer is portable and designed to be used in a variety of circumstances and locations.

Setting up a work environment

Place the computer on a hard flat surface that is large enough for the computer and any other items you are using, such as a printer. Leave enough space around the computer and other equipment to provide adequate ventilation. Otherwise, they may overheat.

To keep your computer in prime operating condition, protect your work area from:

- Dust, moisture, and direct sunlight.

- Equipment that generates a strong electromagnetic field, such as stereo speakers (other than speakers that are connected to the computer) or speakerphones.
- Rapid changes in temperature or humidity and sources of temperature change such as air conditioner vents or heaters.
- Extreme heat, cold, or humidity.
- Liquids and corrosive chemicals.

Keeping yourself comfortable

This section provides information for setting up your work environment and tips for working comfortably throughout the day.

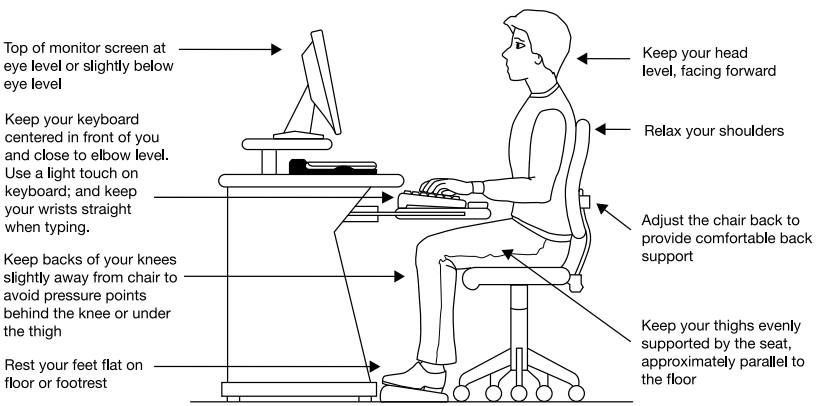
Computer user comfort recommendations

Good Working Posture

- Adjust your chair height: your feet should be flat on the floor and the bottom of your thighs should be evenly supported by the seat. If your feet cannot reach the floor, use a foot rest. Avoid pressure points behind the knee or under the thigh.
- The space under your desk should be free of clutter so that your legs and feet are not restricted, and you can get close enough to your notebook and other items that you use frequently.
- Adjust the chair back rest: it should match the curve of your back and provide comfortable back support.
- Adjust the chair arm rests: they should be about the same height as the keyboard and comfortably support your arms, allowing your shoulders to relax.
- When using the keyboard, it should be centered in front of you.
- The keyboard and pointing device should be close to your elbow level. The keyboard should be flat so that your wrists are straight when typing. However, if the notebook is on a work surface that is above your elbow height you may need to slope the notebook to keep your wrists straight.
- Work with relaxed shoulders.

- When typing, keep your wrists straight and try not to rest your wrists on the notebook. Support your arms on your forearm area. The forearms can be supported by the chair arm supports or the desk surface.
- The notebook display should be tilted so that the image on the screen is clear.
- Avoid glare: position the notebook so that light sources (lamps or windows) do not shine or reflect directly into your eyes. Place the notebook display away from bright light sources or reduce the light intensity from windows by using blinds. Glare on the notebook display may cause eye strain, eye fatigue or headaches.
- Certain notebook displays have a brightness approaching that of a TV device. We recommend that you adjust the brightness of your notebook display to a comfortable level to prevent possible eye strain.
- Keep your head level, facing forward and balanced over your torso.
- Adjust the font size of text on your screen to make viewing comfortable.
- Rest your eyes periodically by focusing on objects that are farther away.

Using the notebook with an external keyboard, mouse or monitor



(Sample Illustration) Correct posture

- When using a notebook for long hours, it may be more comfortable to dock the notebook and use an external keyboard, mouse and monitor.
- The keyboard and mouse (or trackball) should be close to your elbow level.
- The mouse should be next to the keyboard to avoid a reach. If you have to reach, the arm should be supported in the forearm area by the desk surface or the chair arm supports.
- Alternative keyboards, such as the split curved keyboard, may improve shoulder and arm comfort.
- Select a mouse that is comfortable for you to use.
- Don't rest your wrists on the edge of the keyboard or on the work surface when typing.
- The monitor should be about an arm length away while sitting back in the chair.
- The monitor should be centered in front of your body.
- The top of the monitor should be at or slightly below eye level. A monitor that is too high or too low can cause awkward head and neck postures and may lead to discomfort in the neck muscles.
- If you use bifocals you may need to lower the monitor. Alternatively, you might consider customized prescription computer glasses.

Typing style

- Learn to touch type so that you don't have to look down at the keyboard.
- Type with straight wrists.
- Type lightly.
- Learn the keyboard shortcuts for your applications. You will be more productive.
- Use the pointing device (e.g., touch pad, Accupoint®, or tablet pen whichever is available with your notebook computer, or other optional pointing devices like mouse or trackball) with a comfortable hand posture. Avoid awkward hand postures or high gripping force.
- It is helpful to change the type of pointing device that you use on a regular basis to avoid working in just one hand posture.

Taking breaks and varying tasks

- Change the way you work so that you are not stuck in the same posture for long periods of time. Some people find it comfortable to occasionally stand while using the notebook. To do this properly, the notebook needs to be on an elevated surface. Make sure you follow the Good Working Posture points mentioned above while working.
- Take short, strategically spaced rest breaks to avoid eye strain and body fatigue. For example, stand up and walk around or stretch for a few minutes every hour.
- Taking regular breaks is especially important if you are working long hours on your computer or working on a deadline.
- If stress at work is affecting your health, try to identify the sources of the stress and evaluate ways to reduce the stress.

Mobile computing tips

- When using the notebook at airports, on airplanes or trains, or at meetings, make sure that you take the time to consider the points just mentioned.
- When working on the road it may be difficult to set up the notebook in an optimal position. In these situations it is important that you take frequent breaks and change your posture frequently to relieve the excess loads on your body.
- Be creative, when in a hotel room, use a rolled up blanket or pillows to provide back support, or to provide arm support. To position the computer at a good height, remember to operate the computer on a hard flat stable surface. Using your computer on a carpet, blanket or other soft materials can block the air vents including those located at the base of the computer and possibly cause overheating of your computer.

Transporting the notebook

Although your notebook is light, carrying it for a long time may lead to shoulder and arm fatigue. If you carry your notebook with other items, consider using an ergonomically-designed computer case.

Seeking additional help

Follow the advice from your employer's company health and safety staff. Contact them if you need assistance making adjustment to your workstation or adjusting the lighting.

Again, if you experience persistent or recurrent pain, ache, numbness, burning, or stiffness you should promptly see a qualified health care provider. These sensations may be caused by serious medical conditions that can be treated.

For more specific recommendations on the safety and comfort of your computer environment, customers in the United States may visit the United States Department of Labor, Occupational Safety & Health Administration Web site at: http://www.osha.gov/SLTC/etools/computerworkstations/

Check list

- ❑ Is your chair comfortable - does it support your back and arms well?
- ❑ Are your feet flat on the ground?
- ❑ Is there adequate space under your desk for your legs?
- ❑ Are the keyboard and mouse at elbow level?
- ❑ Are your shoulders relaxed when using the keyboard?
- ❑ Are your shoulders relaxed when using a mouse or other optional pointing device?
- ❑ Are your hands and wrists aligned in a comfortable, straight posture?
- ❑ Are your arms supported in the forearm area (not at the wrist)?
- ❑ Do you hold the mouse or trackball with a loose, relaxed hand?
- ❑ Do you use a light touch when typing or using the mouse?
- ❑ Do you clean your mouse or trackball regularly?
- ❑ Is the top of your monitor close to eye level?
- ❑ Is the monitor about an arm length away?
- ❑ Have you eliminated the glare on the monitor?
- ❑ Is the monitor tilted so that it is easy to read?
- ❑ Do you change postures regularly?
- ❑ Do you take breaks, at least once an hour?

Precautions

Your computer is designed to provide optimum safety and ease of use, and to withstand the rigors of travel. You should observe certain precautions to further reduce the risk of personal injury or damage to the computer.

- Avoid prolonged physical contact with the underside or surface of the computer.

WARNING Never allow any liquids to spill into any part of your computer, and never expose the computer to rain, water, seawater or moisture. Exposure to liquid or moisture can cause electric shock or fire, resulting in damage or serious injury. If any of these eventualities should accidentally occur, immediately:

1. Turn off the computer.

2. Disconnect the AC adaptor from the power plug socket and computer.

Failure to follow these instructions could result in serious injury or permanent damage to the computer.

Do not turn on the power again until you have taken the computer to an authorized service center.

CAUTION

- Avoid prolonged physical contact with the underside or surface of the computer.
- Computer base and palm rest can become hot! Avoid prolonged contact to prevent heat injury to skin.

Today's performance computers generate heat under normal operating conditions, as a function of system activity. Avoid extended contact between the computer base or palm rest and your skin. Under certain operating conditions such prolonged contact between the computer base or palm rest and your skin may result in skin irritation and/or heat injury.

Consider using a hard computer insulating pad or similarly suitable hard insulating material when using a computer on your lap.

CAUTION Never place a heavy object on the computer and be careful not to drop a heavy object onto the computer. It could damage the computer or cause system failure.

- Never turn off the computer if a drive light indicates a drive is active.

  Turning off the computer while it is reading from or writing to a disk/disc or flash media may damage the disk/disc or flash media, the drive, or both.

- Keep the computer and disks away from objects that generate strong magnetic fields, such as large stereo speakers.

  Information on some disks is stored magnetically. Placing a magnet too close to a disk can erase important files.

CAUTION Handle discs carefully. Avoid touching the surface of the disc. Grasp it by its center hole and edge. If you handle the disc incorrectly, you could damage the disc and possibly lose data.

- Scan all new files for viruses.

  This precaution is especially important for files you receive via email or download from the Internet. Occasionally, even new programs you buy from a supplier may contain a computer virus. You need a special program to check for viruses.

Important information on your computer's cooling fan

Your computer may have a CPU cooling fan that cools the CPU by drawing outside air into the computer.

WARNING Always make sure your computer and AC adaptor have adequate ventilation and are protected from overheating when the power is turned on or when an AC adaptor is connected to a power outlet (even if your computer is in Sleep mode). In this condition, observe the following:

- Never cover your computer or AC adaptor with any object.
- Never place your computer or AC adaptor near a heat source, such as an electric blanket or heater.
- Never cover or block the air vents including those located at the underside of the computer.
- Always operate your computer on a hard flat surface. Using your computer on a carpet or other soft material can block the vents located at the underside of the computer.

Overheating your computer or AC adaptor could cause system failure, computer or AC adaptor damage or a fire, possibly resulting in serious injury.

NOTE The cooling fan location will vary depending on the computer.

Setting up your computer

TECHNICAL NOTE: You must complete all setup steps up to and including "Setting up your software" on page 40 before adding external or internal components to your computer. These components include, but are not limited to, a mouse, keyboard, and printer.

Your computer contains a rechargeable main battery that needs to be charged before you can use it.

To use external power or to charge the battery you must attach the AC adaptor. See "Connecting to a power source" on page 38.

NOTE Please handle your computer carefully to avoid scratching or damaging the surface.

Connecting to a power source

Your computer requires power to operate. Use the power cord/cable and AC adaptor to connect the computer to a live electrical outlet, or to charge the computer's battery.

⚠WARNING Never pull on a power cord/cable to remove a plug from a socket. Always grasp the plug directly. Failure to follow this instruction may damage the cord/cable, and/or result in a fire or electric shock, possibly resulting in serious injury.

⚠WARNING Always confirm that the power plug (and extension cable plug if used) has been fully inserted into the socket, to ensure a secure electrical connection. Failure to do so may result in a fire or electric shock, possibly resulting in serious injury.

Be careful if you use a multiple connector. An overload on one socket could cause a fire or electric shock, possibly resulting in serious injury.

⚠WARNING Always use the TOSHIBA AC adaptor that was provided with your computer, or use AC adaptors specified by TOSHIBA to avoid any risk of fire or other damage to the computer. Use of an incompatible AC adaptor could cause fire or damage to the computer possibly resulting in serious injury. TOSHIBA assumes no liability for any damage caused by use of an incompatible adaptor.

To connect AC power to the computer:

1 Connect the power cord/cable to the AC adaptor.

⚠WARNING Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.***

2 Plug the AC adaptor cord into the DC-IN on the side of the computer.

NOTE To locate your DC-IN port, please refer to your Quick Start document.

3 Connect the power cord/cable to a live electrical outlet.

The AC power light on the indicator panel glows.

WARNING Never attempt to connect or disconnect a power plug with wet hands. Failure to follow this instruction could result in an electric shock, possibly resulting in serious injury.

The computer's main battery light gives you an indication of the main battery's current charge:

- Glows amber while the main battery is being charged (AC adaptor connected)
- Glows white when the main battery is fully charged
- Is unlit when the main battery has discharged, the battery is not charging, or the AC adaptor is not plugged into the computer or AC outlet
- Flashes amber when the main battery charge is low and it is time to recharge the main battery or plug in the AC adaptor

NOTE If the AC power light flashes amber during charging, either the main battery is malfunctioning, or it is not receiving correct input from the AC power supply.

Charging the main battery

NOTE The computer battery may not be accessible by the user.

Before using the battery to power the computer, you must charge the battery.

To charge the battery, leave the computer plugged into an AC power source with the computer turned off until the battery light glows white. After that, the battery will be completely charged and ready to power the computer.

NOTE Battery life and charge time may vary depending on the applications power management settings, and features used.

Using the computer for the first time

The computer is now ready for you to turn it on and begin using it, see "Exploring Your Computer's Features" on page 86.

NOTE When opening or closing the display panel, place one hand on the palm rest to hold the computer in place and use the other hand to slowly open or close the display panel.

CAUTION To avoid damaging the display panel, do not force it beyond the point where it moves easily and never lift the computer by the display panel.

Do not press or push on the display panel and be careful to remove any pens or other objects from the keyboard area before closing the display panel.

Initial setup

The Startup screen is the first screen displayed when you turn on your computer for the first time. Follow the on-screen instructions on each screen in order to properly install the operating system and begin using your computer.

Setting up your software

CAUTION When you turn on the computer for the first time, do not turn off the power again until the operating system has loaded completely.

NOTE The names of windows displayed, and the order in which windows appear, may vary according to your software setup choices.

The first time you turn on your computer, the setup guides you through steps to set up your software. Follow the on-screen instructions.

Registering your computer with Toshiba

Product registration is strongly recommended, and allows Toshiba to send you periodic updates, announcements, and special offers applicable to your Product. Product registration can be completed by one of three methods:

1. From the Toshiba Web site at register.toshiba.com: Type in the requested information and complete the registration process.
2. From the Start screen: Type **Registration** while in the Start screen, locate and complete the registration process.
3. From the Desktop: Press the **Windows®** (⊞) key to display the Start screen. Click or touch the **Search** (🔍) icon at the upper-right corner of the screen and, in the Search field, type **Registration**. In the list that appears, click or touch **Registration** and complete the registration process.

Failure to complete Product Registration will not diminish your rights under the Toshiba Standard Limited Warranty.

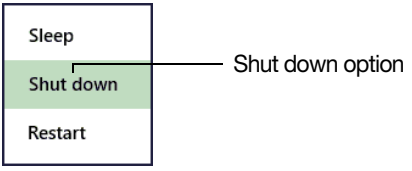
NOTE To register online, an Internet connection is required.

To Shut down your computer

1. Press the **Windows®** (⊞) key to display the Start screen.

CAUTION Pressing the power button before shutting down the Windows® operating system could cause you to lose your work. Make sure the system indicator panel's storage drive light and the drive in-use light are off. If you turn off the power while a disk/disc is being accessed, you may lose data or damage the disk/disc and/or drive.

2 Click or touch the **Power** (⏻) icon at the upper-right corner of the screen.



(Sample Image) Shut down

NOTE To perform a Hybrid shut down, (instead of performing a Shut down), click or touch the **Shut down** option but do NOT hold the Shift key.

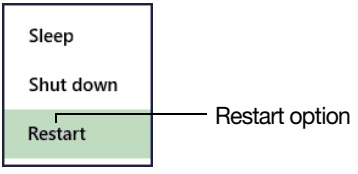
3 Highlight **Shut down** while holding the Shift key, and then click or touch the **Shut down** option.

The computer closes all open applications, shuts down the operating system, and then turns off.

To Restart your computer

1 Press the **Windows®** (⊞) key to display the Start screen.

2 Click or touch the **Power** (⏻) icon at the upper-right corner of the screen.



(Sample Image) Restart

3 Highlight **Restart**, and then click or touch the **Restart** option.

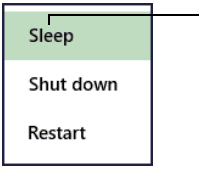
The computer closes all open applications, and restarts the operating system.

To place your computer in Sleep mode

1 Press the **Windows®** (⊞) key to display the Start screen.

CAUTION If you power down using the Sleep command and the battery discharges fully, your unsaved information will be lost. Be sure to save your work first.

2 Click or touch the **Power** (⏻) icon at the upper-right corner of the screen.



(Sample Image) Sleep

3 Highlight **Sleep**, and then click or touch the **Sleep** option.

Sleep mode saves the current state of the computer to memory so that, when you restart the computer, you can continue working from where you left off.

Adding optional external devices

NOTE Before adding external devices, Toshiba recommends setting up your software. See "Setting up your software" on page 40.

After starting your computer for the first time you may want to:

- Connect external devices (see "Connecting an external device" on page 58)
- Connect an external monitor (see "Using external display devices" on page 59)

Adding memory

Your computer comes with enough memory to run most of today's popular applications. Toshiba will not be responsible for any product damage, data loss, service or part replacement made necessary by improper installation of a memory module.

Recovering the Internal Storage Drive

NOTE To purchase an optional external writable optical disc drive, visit the Toshiba Web site at accessories.toshiba.com.

Your computer includes recovery utilities to allow you to recover your internal storage drive if necessary.

The following internal storage drive recovery options are available:

Recovery option	*Description*
Creating recovery media	This option allows you to create the recovery media you will use to restore your computer. See "Creating recovery media" on page 45.
Restoring from recovery media	This option allows you to restore your system from the recovery media you created. See "Restoring from recovery media" on page 48.
Refresh your PC (with user's data)	This option allows you to refresh your system without losing your data. See "Refresh your PC (with user's data)" on page 49.
Reset your PC	This option allows you to remove all data from your system and reinstall Windows®. See "Reset your PC" on page 51.

A recovery image of your computer is stored on the internal storage drive, and the image can be restored by running the recovery utilities directly from your internal storage drive as described in the sections below. However, it is strongly recommended that you create recovery media. If the recovery files on your internal storage drive become corrupted or are deleted, you can restore your system from your recovery media. Also, if your original internal storage

drive fails, you can restore your system to a new internal storage drive from your recovery media. It is strongly recommended that you create recovery media before using your system for the first time. See "Creating recovery media" on page 45 and "Restoring from recovery media" on page 48.

NOTE

- During the recovery process your computer must be connected to an external power source via the AC adaptor.
- When you restore your system, only the operating system files and drivers originally shipped with the computer are restored. Any files that you created are not restored during this process. Be sure to separately save the files you have created to external media using Windows® or another backup program. For more information, see "Backing up your work" on page 72.

Creating recovery media

It is strongly recommended that you create recovery media. If the recovery files on your internal storage drive become corrupted or are deleted, you can restore your system from your recovery media. Also, if your original internal storage drive fails, you can restore your system to a new internal storage drive from your recovery media.

NOTE During the recovery process your computer must be connected to an external power source via the AC adaptor.

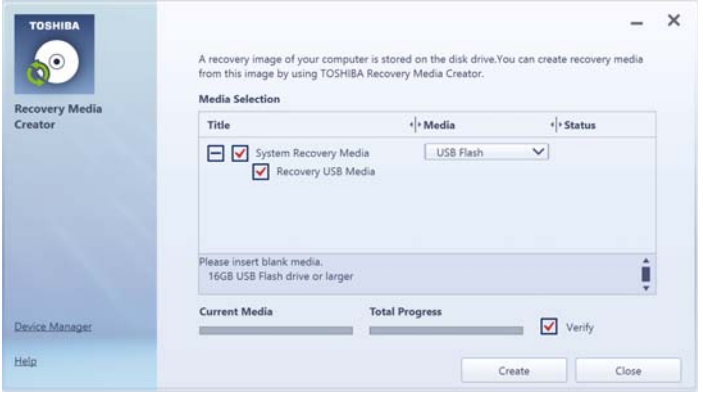
NOTE When you create recovery media, only the operating system files and drivers originally shipped with the computer are backed up to the external media and can be restored from this media. Any files that you created are not backed up on the recovery media. You will need to separately back up the files you created; for more information, see "Backing up your work" on page 72.

When you create recovery media, the system will prompt you to insert several blank DVDs or connect one or more USB flash drives of a certain minimum capacity to your computer. The amount of space required for storing the recovery files varies by computer model. Follow the procedure below to determine how much space you will need for storing your system's recovery files.

To create recovery media:

1 From the Start screen begin typing **Recovery Media Creator** and click or touch your selection. If you are in the Desktop, press the **Windows®** (⊞) key to display the Start screen. Click or touch the **Search** (🔍) icon at the upper-right corner of the screen and, in the Search field, type **Recovery Media Creator**. In the list that appears, click or touch your selection.

   The TOSHIBA Recovery Media Creator dialog box displays.



(Sample Image) TOSHIBA Recovery Media Creator dialog box

NOTE An optional external writable optical disc drive must be connected to your computer in order for the DVD option to display in the dialog box.

2 Select **DVD** or **USB Flash** from the drop-down list, depending on the type of external media you want to use.

3 Check the "Information" area of the dialog box to determine the number of DVDs you will need and/or the minimum amount of storage space required for copying your system's recovery files to USB flash drive(s).

4 Do one of the following:

- If you are copying files to DVD, insert a blank DVD into the optional external writable optical disc drive.
- If you are copying files to a USB flash drive, connect a USB flash drive of the required minimum capacity (as specified in the TOSHIBA Recovery Media Creator utility) to your computer.

CAUTION All information stored on your DVDs or USB flash drive(s) will be erased during the process of creating the recovery media. Be sure to save the information stored on your external media to another storage device before executing this procedure, or use blank media.

5 Click or touch the **Create** button in the TOSHIBA Recovery Media Creator utility dialog box.

6 Follow the on-screen prompts to complete the copy process.

NOTE If you are copying the recovery files to DVDs, be sure to label each DVD in the set sequentially (for example, "1 of 3," "2 of 3," etc.), so that you will know in which order to insert the discs during recovery.

For information on using the Recovery media you have created with the preceding steps, see "Restoring from recovery media" on page 48.

Restoring from recovery media

CAUTION The recovery process deletes information stored on the internal storage drive. Be sure to save your work to external media before executing the recovery (see "Backing up your work" on page 72).

NOTE During the recovery process your computer must be connected to an external power source via the AC adaptor.

If you have created recovery media for your system, you can restore your system from such media, if necessary. For example, if your original internal storage drive fails, you can restore your system to a new internal storage drive from your recovery media. For instructions on creating recovery media, see "Creating recovery media" on page 45.

NOTE When you restore your system, only the operating system files and drivers originally shipped with the computer are restored. Any files that you created are not restored during this process. Be sure to separately save the files you have created to external media using Windows® or another backup program. For more information, see "Backing up your work" on page 72.

To recover your internal storage drive from recovery media:

1. Make sure your computer is turned off.
2. Do one of the following:
   - If your recovery files are on DVDs, insert the first recovery DVD into your optional external writable optical disc drive.
   - If your recovery files are on a USB flash drive, connect the USB flash drive to your computer.
3. Turn on your computer while pressing the F12 key on your keyboard.

   The Boot menu displays.
4. Using the arrow keys, select the **DVD** option or the **USB Flash** option, depending on which type of media you are using, and then press the ENTER key.

5 A warning screen appears, stating that when the recovery is executed all data on your internal storage drive will be deleted and rewritten. Click or touch **Yes** to continue.

6 Follow the on-screen instructions to complete the recovery process.

When the process is complete, a message displays indicating that the drive has been recovered.

7 Click or touch **Finish** to restart the computer.

Refresh your PC (with user's data)

CAUTION Using "Refresh your PC" recovers your Windows® installation to an earlier state while attempting to keep your data and apps you installed from the Windows® Store. Your PC settings and any Desktop Applications installed from media or websites will be deleted. Toshiba does not guarantee that your data will not be deleted during the Refresh process. Please make a back up of your data to external media before executing this process. For more information, see "Backing up your work" on page 72.

NOTE During the recovery process your computer must be connected to an external power source via the AC adaptor.

You can recover the factory default software (refresh your PC), while the computer will attempt to back up your data using the utilities stored on your computer's internal storage drive:

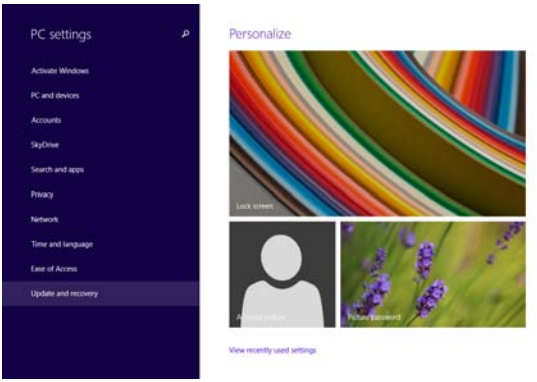
TECHNICAL NOTE: Your data will be copied into the backup folder. All of the data will be moved to this folder during the recovery process, however the current directory structure will be retained.

1 From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge.

2 When the Windows® charms appear click or touch the **Settings** ( ) charm.

3 Click or touch **Change PC Settings**.

The PC settings window appears.



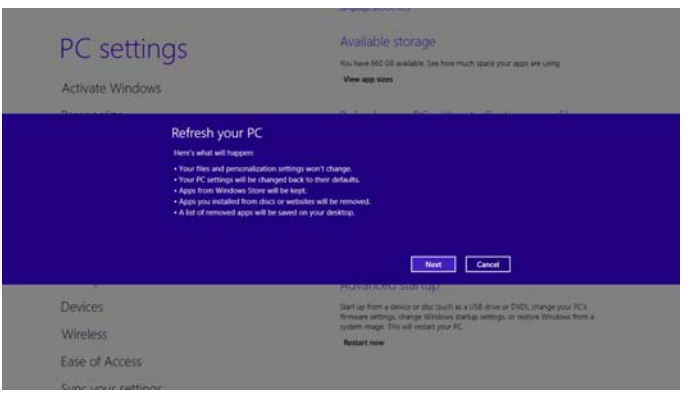
(Sample Image) PC settings screen

4 Click or touch **Update and recovery**.

5 Click or touch **Recovery**.

6 Under **Refresh your PC without affecting your files** click or touch **Get Started**.

The “Refresh your PC” screen appears.

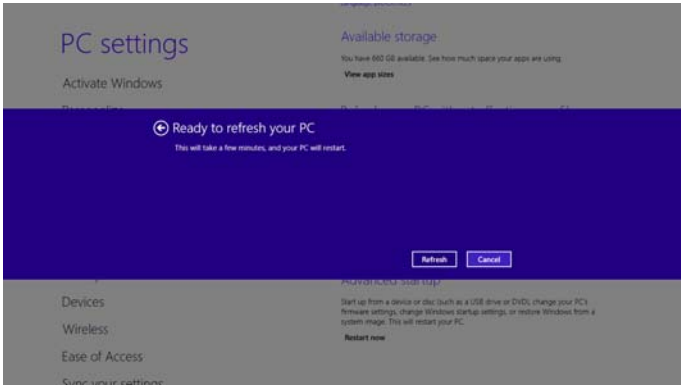


(Sample Image) Refresh your PC screen

CAUTION Toshiba does not guarantee successful data back up. Be sure to save your work to external media before executing the recovery (see “Backing up your work” on page 72).

7 Click or touch the **Next** button to begin.

The “Ready to refresh your PC” screen appears.



(Sample Image) Ready to refresh your PC screen

You will be prompted to refresh your system.

8 Click or touch the **Refresh** button.

9 Your system will restart.

The “Refreshing your PC” window appears. When the process is complete your system will reboot your Windows® operating system.

Reset your PC

CAUTION The recovery process deletes information stored on the internal storage drive. Be sure to save your work to external media before executing the recovery (see “Backing up your work” on page 72).

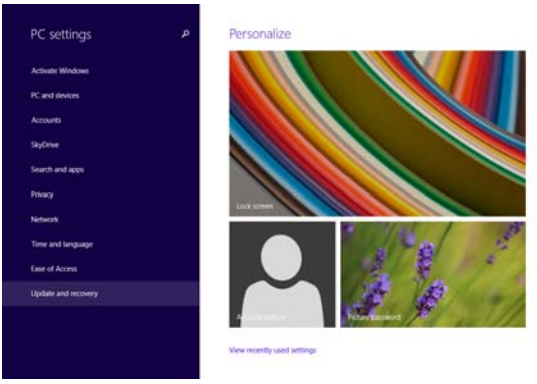
NOTE During the recovery process your computer be must connected to an external power source via the AC adaptor.

1 From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge.

2 When the Windows® charms appear click or touch the **Settings** (⚙) charm.

3 Click or touch **Change PC Settings**.

The PC settings window appears.



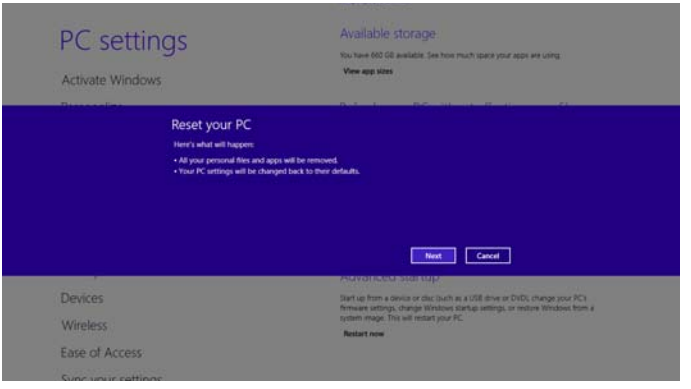
(Sample Image) PC settings screen

4 Click or touch **Update and recovery**.

5 Click or touch **Recovery**.

6 Under **Remove everything and reinstall Windows** click or touch **Get Started**.

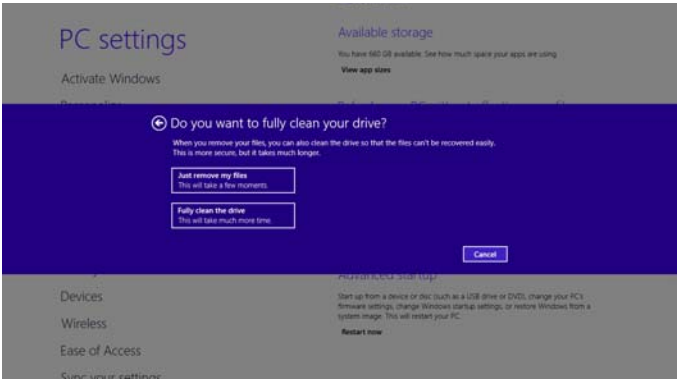
The “Reset your PC” screen appears.



(Sample Image) Reset your PC screen

7 Click or touch the **Next** button.

The “Do you want to fully clean your drive?” screen appears.

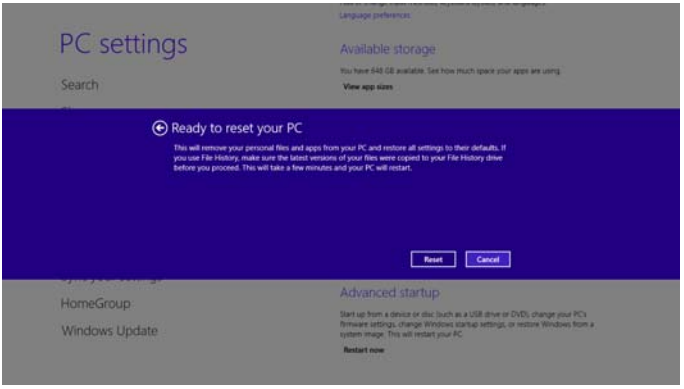


(Sample Image) Do you want to fully clean your drive screen

8 Select one of the following options:

- **Just remove my files**
- **Fully clean the drive**

The “Ready to reset your PC” screen appears.



(Sample Image) Ready to reset your PC screen

9 Click or touch the **Reset** button.

The “Resetting your PC” window appears. When the process is complete your system will reboot your Windows® operating system.

NOTE Selecting the "Fully clean the drive" option may take several hours.

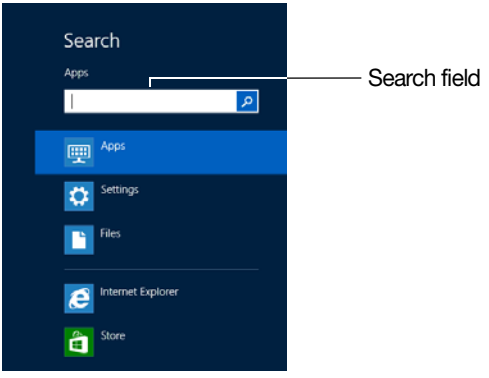
Installing drivers and applications

The TOSHIBA Application Installer allows you to reinstall the drivers and applications that were originally bundled with your computer.

NOTE You must have an Internet connection to reinstall applications.

To reinstall drivers and applications:

1. From the Start screen begin typing **TOSHIBA Application Installer** and click or touch your selection. If you are in the Desktop, press the **Windows®** (⊞) key to display the Start screen. Click or touch the **Search** (🔍) icon at the upper-right corner of the screen and, in the Search field, type **TOSHIBA Application Installer**. In the list that appears, click or touch your selection.



(Sample Image) Installing drivers and applications

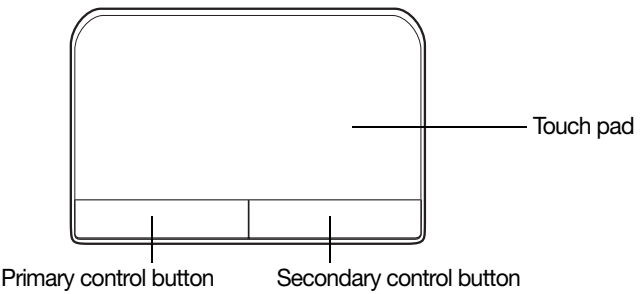
2. Click or touch **Next**.
3. Click or touch the item you want to install.
4. Click or touch **Install**.
5. Follow the on-screen prompts to complete the installation process, see "TOSHIBA Application Installer" on page 108.

Using the touch pad

NOTE Some of the touch pad operations described in this section are only supported in certain applications, and only on certain models.

You can use the touch pad (the small, touch-sensitive area in front of the keyboard) and the adjacent control buttons to:

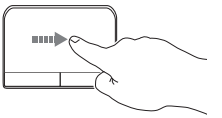
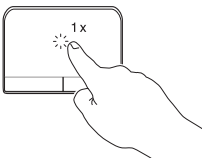
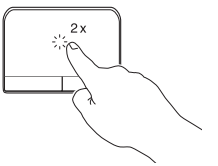
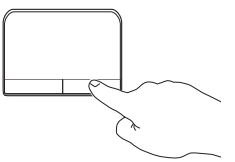
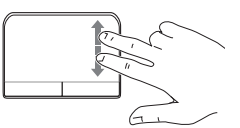
- Move the pointer on the screen
- Select an item on the screen
- Open or activate an item on the screen
- Scroll through a document or information
- Zoom in for a close-up view
- Zoom out to see more information at once

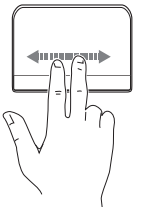
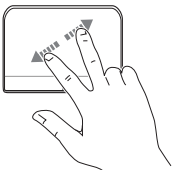
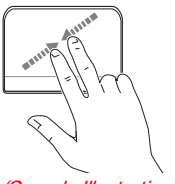


(Sample Illustration) The touch pad and associated control buttons

Refer to the table below for specific instructions on performing each operation.

NOTE The *pointer* is the icon (usually an arrow) that moves on the screen when you slide your finger across the touch pad or move a mouse connected to your computer.

To:	*Do the following:*	*Example:*
Move the on-screen pointer	Slide your finger across the touch pad in the direction you want to move the pointer. To move the pointer a longer distance, slide your finger several times across the touch pad in the preferred direction.	 *(Sample Illustration) Pointer moves to the right*
Select an item	1 Move the pointer to the item you want to select. 2 Do one of the following: ❖ Tap the touch pad once OR ❖ Press and release the primary (left-hand) control button	 *(Sample Illustration) Tap once to select*
Open or activate an item	1 Move the pointer to the item you want to open/activate. 2 Do one of the following: ❖ Tap the touch pad twice in rapid succession OR ❖ Press and release the primary control button twice in rapid succession	 *(Sample Illustration) Tap twice to open*
Right-click an item	1 Move the pointer to the item you want to right-click. 2 Press and release the secondary control button. This feature varies by program. Check your program documentation for specific instructions on right-clicking.	 *(Sample Illustration) Click the secondary (right-hand) control button*
Scroll vertically	Slide your finger along the right edge of the touch pad in the direction you want to scroll. Repeat to scroll a longer distance.	 *(Sample Illustration) Vertical scrolling active area*

To:	*Do the following:*	*Example:*
Scroll horizontally	Slide your finger along the bottom edge of the touch pad in the direction you want to scroll. Repeat to scroll a longer distance.	 *(Sample Illustration) Horizontal scrolling active area*
Zoom in/out	To zoom in: ❖ Place two fingers close together on the touch pad and then slide them apart.	 *(Sample Illustration) Zooming in*
	To zoom out: ❖ Place two fingers slightly apart on the touch pad and then slide them together.	 *(Sample Illustration) Zooming out*

Adjusting touch pad settings

While you are typing, the on-screen pointer may seem to move or jump around “by itself” to random locations on the screen. The on-screen pointer may also seem to automatically select text, click buttons, and activate other user interface elements. For help with these problems, try one or more of the following:

- Try adjusting your typing technique to avoid accidental contact with the touch pad. You may be inadvertently brushing the touch pad with the heel of your hand as you type. Also, accidental light touches or taps on the touch pad may select an item or text on the screen, and potentially the item or text may be replaced by the next character you type.

- Temporarily disable the touch pad, so that it does not respond to touch or button presses while you type. See "Disabling or enabling the touch pad" on page 58.
- Adjust the sensitivity of the touch pad, so that it is less responsive to accidental light taps and lighter finger pressure.

NOTE Touch pad setting options vary by computer model. The touch pad settings are accessible through the Mouse Properties option of the Windows Control Panel. For more information, please visit support.toshiba.com.

Disabling or enabling the touch pad

The touch pad is enabled by default. To enable/disable the touch pad, press F5. For more information, see "Disabling or enabling the touch pad" on page 136.

Connecting an external device

NOTE Depending on your system, some models may include USB 3.0 port(s). To distinguish these ports, please look for the blue inset within the USB 3.0 port (if available).

You can easily attach an external device your computer.

To do this:

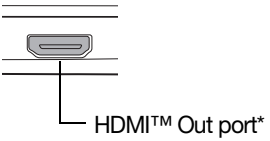
1. Read the directions that came with the device to see if you first need to install new software.
2. Connect the device's video or USB cable to the port on the computer and to the device.
3. Connect the device's power cable to a live electrical outlet (if applicable).
4. Turn on the external device (if applicable).

   Your computer may automatically detect the external device.

Using external display devices

Your device comes with a built-in display, but you can also connect an HDMI™-compatible television or external display device via the Micro HDMI™ Out port*.

NOTE To locate your HDMI™ port*, please refer to your Quick Start document.



*Available on certain models

(Sample Illustration) Video port on right side of computer

Selecting video cables

To connect a device to the HDMI™ Out port, you must purchase an HDMI™ cable.

Connecting an HDMI™-compatible television or display device

To connect an HDMI™-compatible television or display device to the computer:

- Connect one end of an HDMI™ cable (not included with your computer) to the HDMI™ Out port on the side of your computer, and then connect the other end of the cable to your television or display device. Refer to the manual that came with the television or display device for more information.

  Your computer should automatically detect the external display device.

NOTE You can change the display settings by pressing the (⊞) + P keys, or by configuring the display properties settings.

Directing the display output when you turn on the computer

Once you have connected an external display device, you can choose to use the internal display only, the external device only, or both simultaneously.

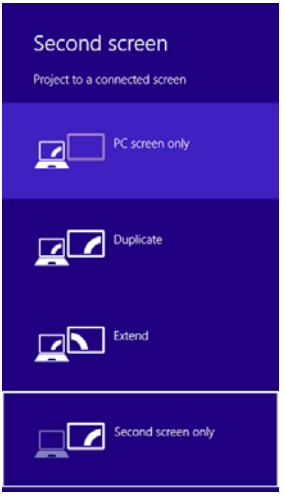
NOTE Some modes are only available with the appropriate device attached and turned on.

The quickest way to change the display output settings is to use the (⊞) + P keys:

Press the (⊞) + P keys repeatedly until the setting you want takes effect. Briefly pause each time you press the (⊞) + P keys to allow time for the display to change.

This cycles through the settings in the following order (the last two options are available if an external monitor is connected):

- PC screen only
- Duplicate
- Extend
- Second screen only



(Sample Image) Display options window

NOTE Press the **Windows®** (⊞) + P keys navigate through the options without activating a selection. Release the **Windows®** (⊞) key to activate a selection.

NOTE You may also use the F4 key, and then press ENTER to activate a selection.

Adjusting the quality of the external display

To obtain the best picture quality from your television (or other video display device), you may need to adjust the video settings. See the video device documentation for additional configuration steps.

Customizing your computer's settings

There are several ways in which you can customize your computer to suit your particular requirements. You can go into your computer settings to make adjustments to your computer to suit your needs.

From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear, click or touch the **Settings** (⚙) charm, and then click or touch **Change PC Settings**. Then choose a category you wish to change. Refer to your operating system documentation or Help and Support for details.

You may also wish to customize your power usage settings. For more information, see "Power Plans" on page 81. There are additional custom settings you can choose. See "Utilities" on page 97.

Caring for your computer

This section gives tips on cleaning and moving your computer. For information about taking care of your computer's battery, see "Taking care of your battery" on page 83.

NOTE Please handle your computer carefully to avoid scratching or damaging the surface.

Cleaning the computer

CAUTION Keep liquids, including cleaning fluid, out of the computer's keyboard, speaker, and other openings. Never spray cleaner directly onto the computer and/or display. Never use harsh or caustic chemical products to clean the computer.

To keep your computer clean, gently wipe the display panel and exterior case with a lightly dampened cloth.

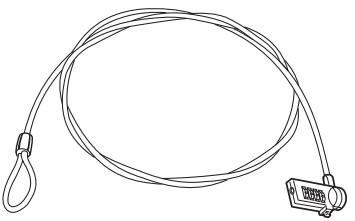
Moving the computer

Before moving your computer, even across the room, make sure all drive activity has ended (the internal storage drive and optical disc drive indicator lights stop glowing) and all external peripheral cables are disconnected.

CAUTION Do not pick up the computer by its display panel or by the back. Doing so could damage the system.

Using a computer lock

You may want to secure your computer to a heavy object such as your desk. The easiest way to do this is to purchase an optional computer lock cable. For more information on purchasing a cable lock, visit accessories.toshiba.com.



(Sample Illustration) Computer lock cable

To secure the computer:

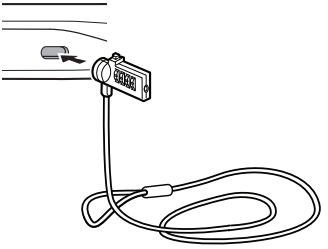
1. Wrap the cable through or around some part of a heavy object.

   Make sure there is no way for a potential thief to slip the cable off the object.

2. Pass the locking end through the loop.

3 Insert the cable's locking end into the security lock slot on your computer, then engage the locking device.

The computer is now securely locked.



(Sample Illustration) Attaching security lock cable

Chapter 2

Learning the Basics

This chapter gives some computing tips and provides important information about basic features.

Computing tips

- Save your work frequently.

  Your work stays in the computer's temporary memory until you save it to the internal storage drive. If the network you are using goes down and you must restart your computer to reconnect, or your battery runs out of charge while you are working, you will lose all work since you last saved.

  See "Saving your work" on page 71 for further information.

HINT: Some programs have an automatic save feature that can be activated. This feature saves your file to the internal storage drive at preset intervals. See your software documentation for details.

- Back up your files to external media on a regular basis. Label the backup copies clearly and store them in a safe place.

  It is easy to put off backing up because it takes time. However, if your internal storage drive suddenly fails, you will lose all the data on it unless you have a separate backup copy. For more information, see "Data and system configuration backup in the Windows® operating system" on page 126.

- Use Error-checking and Disk Defragmenter regularly to check and optimize disk space and improve performance.

- Scan all new files for viruses.

  This precaution is especially important for files you receive via external media, email, or download from the Internet.

- Take frequent breaks to avoid repetitive-motion injuries and eyestrain.

- Do not turn off the computer if a drive indicator light indicates a drive is active.

  Turning off the computer while it is reading from or writing to a disk may damage the disk, the drive, or both.

NOTE The Windows® operating system records information, such as your desktop setup, during its shutdown procedure. If you do not let the Windows® operating system shut down normally, details such as new icon positions may be lost.

Display configuration modes

The following are some examples of the various positions to place your computer in:

(Sample Illustrations) Display configuration mode positions

CAUTION Disconnect the AC adaptor before moving or lifting the computer.

Disconnect the AC adaptor and all peripherals/cables before changing the position of the display mode.

Failure to follow these instructions may result in damage to the computer and/or attached peripherals/cables.

CAUTION Do not lift the computer by the display panel. Doing so could damage the system.

Screen Auto-rotation

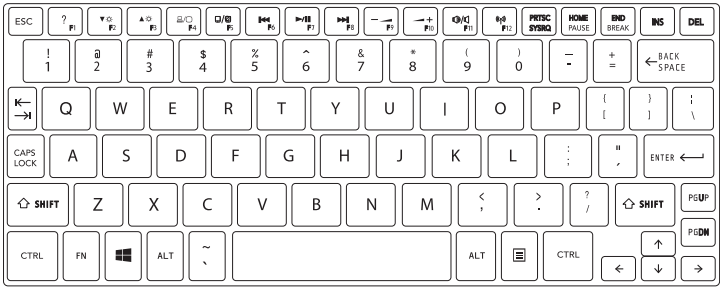
NOTE When you rotate the device from portrait to landscape (or vice versa) while in Audience, Tablet, and Presentation modes, the screen orientation automatically changes according to the rotation angle.

To lock the screen so that it does not rotate automatically, orient the device in the desired screen rotation (portrait or landscape) and perform the following steps:

1. From the Start screen, swipe in from the right edge.
2. When the Windows® charms appear, touch the **Settings** (⚙) charm.
3. Touch the **Screen** (🖵) icon.
4. Touch the **Auto-rotate** icon.

Using the keyboard

Your computer's keyboard contains character keys, control keys, function keys, and special Windows® keys.



(Sample Illustration) Keyboard

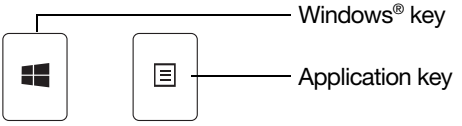
Function keys

The function keys (not to be confused with the Fn key) are the 12 keys at the top of the keyboard.

(Sample Illustration) Function keys

F1 through F12 are called function keys because they execute programmed functions when pressed. Used in combination with the Fn key, function keys marked with icons execute specific functions on the computer. For example, F5 turns the touch pad ON/OFF. For more information, see "TOSHIBA Function Keys" on page 133.

Special Windows® keys



(Sample Illustration) Special Windows® keys

Your computer's keyboard has one key and one button that have special functions in Windows®:

- **Windows® key**—Toggles between the Start screen and the last app opened, or between the Desktop and Start screens if no apps are open. For more information refer to Help & Support, or see "Exploring the Start screen" on page 86
- **Application key**—Has a similar function as the secondary mouse button

Touch screen

Your computer comes with a touch screen, enabling direct interaction with displayed apps and programs through simple or multi-touch gestures.

Touch screen navigation

Use your finger to manipulate the on-screen icons, buttons, menu items, and other items on the touch screen. You can also change the screen's orientation.

CAUTION The screen is made of glass so avoid contact with sharp, rough, or abrasive objects or substances as screen may break or scratch if not handled properly. If you see a crack in the glass, discontinue use of the device to avoid injury.

Touch—Touch to activate items displayed on the screen, such as app and setting icons or on-screen buttons. Touch to type using the keyboard.

Touch & hold—Touch and hold an item on the screen by touching and holding the item in place until an action occurs.

Drag—Touch and hold an item for a moment and then, without lifting your finger, move the item until you reach the target position. For example, drag items on any app screen to reposition them.

Swipe or slide—To swipe or slide, quickly move your finger across the surface of the screen without pausing. For example, swipe your finger to the left from the right edge of the screen to display the Windows® charms.

Double-tap—Tap quickly twice to zoom in. For example, double-tap a section of a Web page to zoom in on that section. Double-tap again to zoom out.

Zoom out—Place and pinch two fingers together to stretch or zoom out. (Applicable to apps that support this function.)

Zoom in—Place and spread two fingers apart to zoom in. (Applicable to apps that support this function.)

Rotate—Place two or more fingers on an item and rotate your hand. The item rotates in the direction you turn your hand. (Not functional in all apps).

Swipe from right edge—Swipe in from the right edge to display the charms.

Swipe from left edge—Swipe in from the left edge to display an open app.

Snaps open apps (swipe in from the left edge and slide the divider to adjust the app size).

Displays recently opened apps (swipe in from left edge, holding your finger down, and then push the app back toward the left edge).

Swipe from top or bottom edge—Swipe in from the top or bottom edge to display commands.

You can also close an app by dragging it to the bottom of the screen.

Mouse properties

Mouse properties allow you to change your pointing device or mouse settings.

To access Mouse properties:

1. If you are in the Desktop, press the **Windows®** (⊞) key to display the Start screen. Click or touch the **Search** (🔍) icon at the upper-right corner of the screen and, in the Search field, type **Mouse**. In the list that appears, click or touch your selection.

   The Mouse screen appears.

2. Adjust the settings as desired, and then click or touch **OK**.

Starting an app

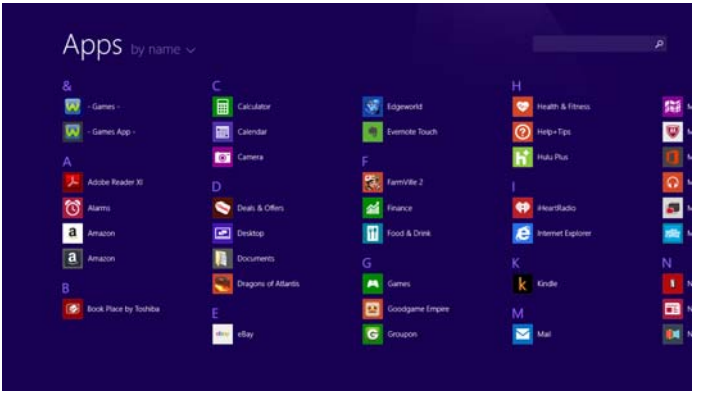
To Start an app on the Start screen, move your pointer over the appropriate app tile and click or touch to open.

To Start an app from the Desktop, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms slide out from the right, click or touch the **Start** (⊞) charm, and then click or touch the appropriate app tile to open.

Starting an app from the Start screen

To start an app on the Start screen, move your pointer over the appropriate tile and click or touch to open. Swipe your finger to the left or right to reveal more available tiles.

To search for an app using the Apps page, click or touch the **Down arrow** ( ) icon in the lower-left corner of the Start screen. The Apps screen appears with the available system apps to choose from, or you can enter your search in the search field.



(Sample Image) Searching for apps

NOTE To return the Start screen, click or touch the **Up arrow** ( ) icon in the lower-left corner of the screen.

Saving your work

Before you turn off the computer using the Shut down command, save your work on the internal storage drive, external media, flash media, or optical disc. This is one of the most important rules of computing.

Many applications offer a feature that saves documents at regular intervals. Check your program's documentation to see if it has an automatic save feature.

Backing up your work

Back up all the files you create in case something happens to your computer. You can back up your files to different types of media such as USB Flash, CDs, DVDs, external storage media, or to a network, if available.

To back up several files at one time, use the Microsoft® Windows® file recovery program preinstalled on the computer's internal storage drive. Also see "Backing up your data or your entire computer with the Windows® operating system" on page 128.

HINT: Backing up all the files on your internal storage drive may take a considerable amount of time and multiple CDs/DVDs. You may prefer to use a high-capacity file recovery system, such as an external hard drive.

Toshiba's online resources

Toshiba maintains a number of online sites to which you can connect. These sites provide information about Toshiba products, give help with technical questions and keep you up to date with future upgrades. For more information, see "Contacting Toshiba" on page 131.

Chapter 3

Mobile Computing

This chapter covers all aspects of using your computer while traveling.

Toshiba's energy-saver design

Your computer enters a low-power suspension mode when it is not being used, thereby conserving energy and saving money in the process. It has a number of other features that enhance its energy efficiency.

Many of these energy-saving features have been preset by Toshiba. We recommend you leave these features active, allowing your computer to operate at its maximum energy efficiency, so that you can use it for longer periods while traveling.

Running the computer on battery power

The computer contains a Lithium-Ion (Li-Ion) battery that provides power when you are away from an AC outlet. You can recharge it many times.

Battery Notice

Battery life rating is for comparison purposes only, and does not indicate the battery life that will be obtained by any individual user. Actual battery life may vary considerably from specifications depending on product model, configuration, applications, power management settings and features utilized, as well as the natural performance variations produced by the design of individual components. The battery life rating is only achieved on the select models and configurations tested by Toshiba under the specific test settings at the time of publication and is not an estimate of a system's battery life under any conditions other than the specific test settings.

Recharge time varies depending on usage. Battery may not charge while the computer is consuming full power. After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries.

To ensure that the battery maintains its maximum capacity, operate the computer on battery power at least once a month. The Lithium-Ion battery has no memory effect so it is not necessary to let the battery fully discharge each time. However, for better accuracy of the battery meter, it is helpful to fully discharge the battery periodically. Please see "Maintaining your battery" on page 84 for procedures. If the computer is continuously operated on AC power, either through an AC adaptor or a port replicator (if applicable to your system), for an extended period (more than a month), the battery may fail to retain a charge. This may shorten the life of the battery, and may cause the battery meter to be inaccurate.

NOTE For best performance when playing streaming media (especially streaming video), either power the computer from its AC adaptor, or set up a power plan that keeps the computer running at full performance even when powered from its battery. For more information about Windows® power plans, see "Power Plans" on page 81.

The computer may also have an internal real-time-clock (RTC) battery.

The RTC battery powers the RTC memory that stores your system configuration settings and the current time and date information. It maintains this information for up to a month while the computer is turned off.

TECHNICAL NOTE: Depending on your system, the RTC battery may only charge while the computer is turned on.

Power management

Your computer ships with the power management options preset to a configuration that will provide the most stable operating environment and optimum system performance for both AC power and battery modes.

CAUTION Changes to these settings may result in system performance or stability issues. Users who are not completely familiar with the power management component of the system should use the preset configuration. For assistance with setup changes, contact Toshiba's Customer Support Center.

Charging the main battery

The battery needs to be charged before you can use it to power the computer.

CAUTION Always use the AC adaptor specified by Toshiba. You can order a Toshiba AC adaptor from Toshiba's Web site at accessories.toshiba.com.

NOTE Battery charge time may vary depending on the applications, power management settings, and features used.

To charge the main battery, plug the computer into a live electrical outlet. The battery charges whether the computer is on or off.

TECHNICAL NOTE: The recharging of the battery may not occur when your computer is using all of the power provided by the AC adaptor to run applications, features, and devices. Your computer's Power Options utility can be used to select a power level setting that reduces the power required for system operation and will allow the battery to recharge.

The battery may not start charging immediately under the following conditions:

- The battery is extremely hot or cold.

  To ensure that the battery charges to its full capacity, wait until it reaches room temperature (50 to 80 degrees Fahrenheit, 10 to 26 degrees Celsius).

- The battery is almost completely discharged.

  Leave the power connected and the battery should begin charging after a few minutes.

HINT: Once the battery is fully charged, we recommend that you periodically operate your computer on battery power until the battery discharges completely.

CAUTION Please make a complete back up of your data to external media before discharging the battery. For more information, see "Backing up your work" on page 72.

Charging the RTC battery

Your computer may have an internal real-time clock (RTC) battery. The RTC battery powers the System Time Clock and BIOS memory used to store your computer's configuration settings. When fully charged, it maintains this information for up to a month when the computer is powered off.

The RTC battery may have become completely discharged while your computer was shipped, resulting in a CMOS error message during startup. The error message may vary by computer model.

NOTE Depending on your system, the RTC battery may only charge while the computer is turned on.

To recharge the RTC battery, plug the computer into a live electrical outlet and leave the computer powered on for 24 hours.

NOTE It is seldom necessary to charge the RTC battery because it charges while the computer is on. If the RTC battery is low, the real-time clock and calendar may display the incorrect time and date or stop working.

When Hibernation mode is enabled and the RTC battery is completely discharged, a warning prompts you to reset the real-time clock.

The computer can be used while the RTC battery is being charged, although the charging status of the RTC battery cannot be monitored.

Monitoring battery power

NOTE To locate your system indicator lights, please refer to your Quick Start document.

The computer's main battery light gives you an indication of the main battery's current charge.

- Glows amber while the main battery is being charged (AC adaptor connected)
- Glows white when the main battery is fully charged

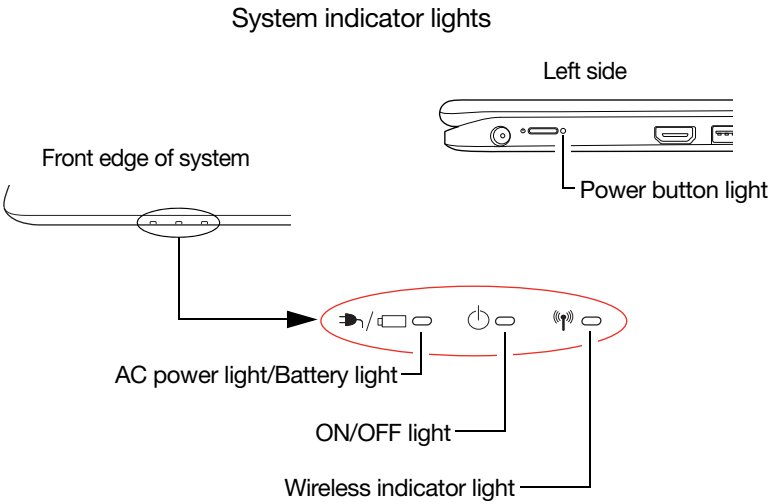
NOTE Battery life and charge time may vary, depending upon power management settings, applications and features used.

- Flashes amber when the main battery charge is low and it is time to recharge the main battery or plug in the AC adaptor

NOTE If the AC power light flashes amber during charging, either a battery pack is malfunctioning, or it is not receiving correct input from the AC power supply.

HINT: Be careful not to confuse the AC power light/Battery light (⇆/▭) and ON/OFF light (⏻).

When the AC power light/Battery light or ON/OFF light flashes amber, it indicates that the system is suspended (using the Windows® operating system Sleep command).



(Sample Illustration) Power and battery light locations

Determining remaining battery power

NOTE Wait a few moments after turning on the computer before trying to monitor the remaining battery power. The computer needs this time to check the battery's remaining capacity and perform its calculations.

Move the pointer over the power icon in the notification area, see "Finding your way around the desktop" on page 88 for more information on the notification area. A pop-up message displays the remaining battery power as a percentage.

With repeated discharges and recharges, the battery's capacity gradually decreases. A frequently used older battery does not power the computer for as long as a new battery, even when both are fully charged.

TECHNICAL NOTE: The computer drains the battery faster at low temperatures. Check your remaining charge frequently if you are working in temperatures below 50 degrees Fahrenheit.

The computer calculates the remaining battery charge based on your current rate of power use and other factors such as the age of the battery.

What to do when the main battery runs low

When the main battery runs low you can:

- Plug the computer into an external power source and recharge the main battery
- Save your work and turn off the computer

If you do not manage to do any of these things before the main battery completely runs out of power, the computer automatically enters Hibernation mode and turns itself off. Hibernation mode keeps track of where you were, so that when you turn on the power again, you can continue where you left off.

Setting battery notifications

You can set two notifications. Each notification can be set to alert you when a specified percentage of remaining battery power has been reached. You can also set the computer to enter Sleep mode or Hibernation mode or to completely shut down when the notification goes off.

To change the default notification settings:

1. While on the desktop, click or touch the **Battery** icon in the notification area.
2. Click or touch **More power options**.

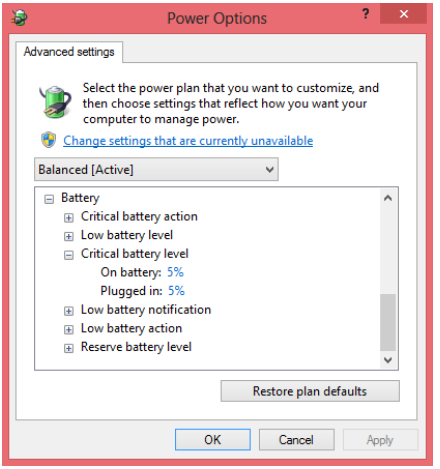
   The Power Options window appears.
3. Click or touch **Change plan settings** under the power plan to be customized.

   The Edit Plan Settings window appears.

4 Click or touch **Change advanced power settings**.

The Advanced settings tab of the Power Options window appears.

5 Double-click or touch **Battery** to display the battery options.



(Sample Image) Advanced settings tab of Power Options screen

6 Configure the alarm settings to suit your needs.

Conserving battery power

How long a fully charged battery pack lasts when you are using the computer depends on a number of factors, such as:

- How the computer is configured
- How much you use the internal storage drive, optical disc drive, or other optional devices
- Where you are working, since operating time decreases at low temperatures

There are various ways in which you can conserve power and extend the operating time of your battery:

- Enable Sleep or Hibernation, which saves power when you turn off the computer and turn it back on again
- Use the Windows® power-saving option plans

These power-saving options control the way in which the computer is configured. By using them, you can increase the length of time you can use the computer before you need to recharge the battery.

Microsoft® has combined these options into preset Power Plans. Using one of these power plans lets you choose between maximum power savings and peak system performance. You may also set individual power-saving options to suit your own needs.

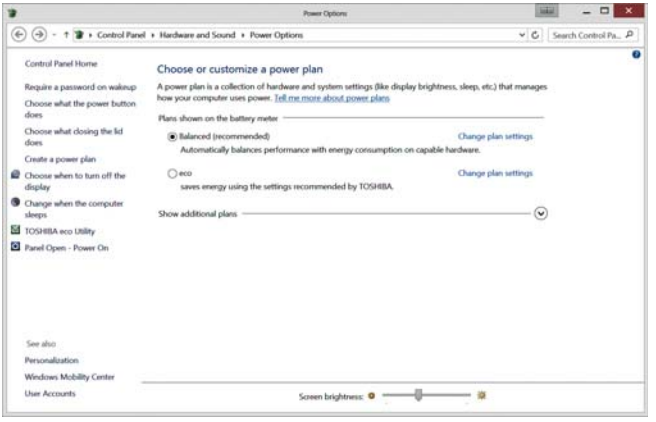
The following sections describe how to choose a Power Plan and discuss each power-saving option.

Power Plans

You can choose a predefined Power Plan or select your own combination of power options. To do this:

1. While on the desktop, click or touch the **Battery** ( ) icon in the notification area.
2. Click or touch **More power options**.

   The Windows® Power Options window appears.



(Sample Image) Windows® Power Options window

3. Select an appropriate plan for your work environment or create your own custom plan.
4. Click or touch **Create a power plan** in the left pane to set up a new plan.

NOTE To edit a plan or to edit advanced settings, continue to the following steps.

5 Click or touch **Change plan settings** to choose the plan you want to edit.

This screen allows you to change basic settings.

6 Click or touch **Change advanced power settings** to access settings for battery notification levels, internal storage drive power save time, etc.

You can click or touch the plus signs to expand each item and to see what settings are available for each item.

7 Click or touch **OK** to save the plan changes you have performed.

Depending on your model, the two power plans eco and Balanced are satisfactory for most people and do not need to be edited. The eco plan is the best used for maximum battery time. The Balanced plan is a compromise between battery time and performance.

Using the eco power plan

This computer is equipped with the eco power plan. Operating the computer with this power plan enabled reduces electrical power consumption by slightly lowering system performance. For example, when this power plan is enabled, the brightness of the display is reduced and the interval before Sleep mode takes effect is shortened. To enable or disable the eco power plan, see “Power Plans” on page 81.

The eco Utility® monitors your power savings from using the eco power plan by tracking real-time power consumption and accumulated savings over time. To learn how to access the utility, see “eco Utility®” on page 98.

For more information on the eco power plan, see the Help file in the eco Utility® window.

Changing the main battery

When your main battery has run out of power, plug in the AC adaptor.

If you find that a new battery is needed, contact the location where you purchased the computer for more information on replacing the battery. Toshiba will not be responsible for any product damage, data loss, service, or part replacement made necessary by improper installation of a new battery.

WARNING If the device is leaking or its case is cracked, put on protective gloves to handle it.

Taking care of your battery

The following sections offer tips on how to take care of your battery and prolong its life.

Safety precautions

WARNING Always immediately turn the power off and disconnect the power cable/cord plug from the plug socket and stop using the computer if you observe any of the following conditions:

- Offensive or unusual odor
- Excessive heat
- Discoloration
- Deformation, cracks, or leaks
- Smoke
- Other unusual events during use, such as abnormal sound

Do not expose the computer to fire. The battery could explode

Do not turn on the computer's power again until an authorized Toshiba service provider has checked it for safety. Continued use could cause a fire or rupture possibly resulting in serious injury or computer failure including but not limited to the loss of data.

Maintaining your battery

Fully discharging your battery pack will allow better accuracy of the battery meter.

To fully discharge your battery pack periodically, disconnect the computer from a power source and operate it on battery power until the battery pack fully discharges.

Disposing of your computer

WARNING Never attempt to dispose of a computer by burning or by throwing it into a fire, and never allow exposure to a heating apparatus (e.g., microwave oven). Heat can cause a computer to explode and/or release caustic liquid, both which may possibly cause serious injury.

Discard this computer in accordance with applicable laws and regulations.

Disposal of this product may be regulated due to environmental considerations. For disposal, reuse or recycling information, please contact your local government.

For more information, see "Computer Recycling Information" on page 18, or for complete information about Toshiba's recycling programs and initiatives, please visit toshiba.com/recycle.

Traveling tips

The environmental precautions listed in "Selecting a place to work" on page 29, also apply while traveling.

- Never leave your computer on a sunny ledge or in a place where it could get wet or covered in dust.
- Always travel with the computer in a carrying case. Toshiba offers a choice of carrying cases for the computer. They all provide plenty of extra space for manuals, power cords, and compact discs. Contact your authorized Toshiba representative for more information or visit Toshiba's Web site at accessories.toshiba.com.

TECHNICAL NOTE: When traveling by air, you may be required to pass your computer through airport security equipment. The X-ray equipment will not harm your computer.

NOTE Before using your computer aboard an aircraft, make sure the Wireless antenna is OFF (Airplane mode is ON) if your computer has wireless LAN capability.

NOTE To enable or disable wireless communication, use the F12 key. For more information see "TOSHIBA Function Keys" on page 133.

Chapter 4

Exploring Your Computer's Features

In this chapter, you will explore some of the special features of your computer.

Exploring the Start screen

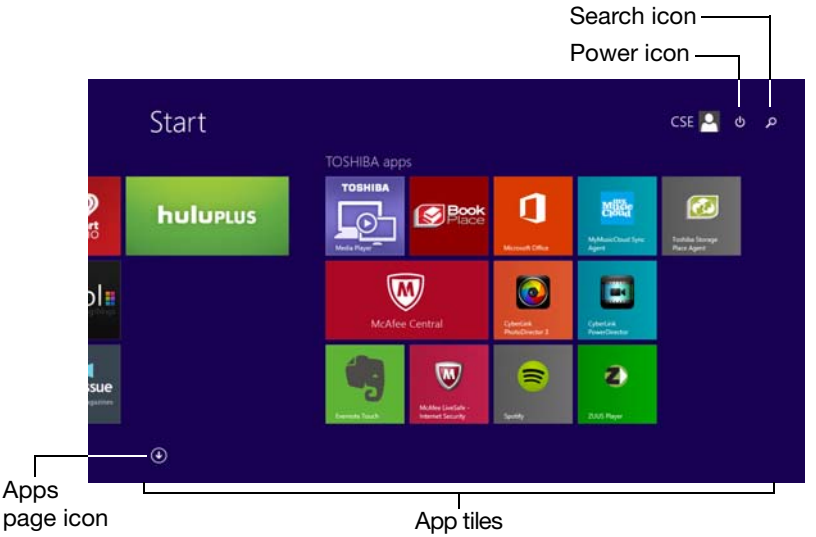
The Start screen is the launching pad for everything you can do in the Windows® operating system, providing new and easy ways to access everything from your favorite apps and Web sites to your contacts and other important information.

When you move your pointer to the upper-right corner of the screen or swipe in from the right edge, a list of Windows® charms will slide out from the right. These Windows® charms perform various commands, including basic tasks like turning off the power and advanced PC settings.

You can go to the Start screen by clicking or touching the **Start** charm, see "Charms" on page 87. You can also use the **Windows®** key (⊞) on your keyboard or on the LCD screen to go to the Start screen or to toggle back to the Desktop screen. For detailed information, please refer to the Windows® Help and Support.

By clicking on or touching the **Desktop** tile from the Start screen, you will find the Windows® settings and features you are most familiar with.

For detailed information on the new functionality, refer to the Windows® Help and Support.



(Sample Image) Windows® Start screen

Charms

Use the Windows® charms to start apps, find documents, set up system components, and perform most other computing tasks.

By moving your pointer to the upper-right corner of the screen or swiping in from the right edge of your screen, you will find a list of charms: **Search**, **Share**, **Start**, **Devices**, and **Settings**.

You may also access the **Power** and **Search** icons in the upper-right corner of the Start screen.

Search—This charm allows you to search for most anything you need to locate on your computer. It can help you find apps, documents, photos, and your favorite music.

Share—This charm allows you to share music and photos with your favorite social Web sites.

Start—This charm allows you to view all of the available apps downloaded to your system.

Devices—This charm allows you to manage your hardware devices.

Settings—This charm allows you to manage your system settings.

Tiles

Tiles can be accessed and launched from the Start screen.

Typical Start screen tiles are the Desktop tile and Mail tile, as well as tiles representing all other applications downloaded to your system.

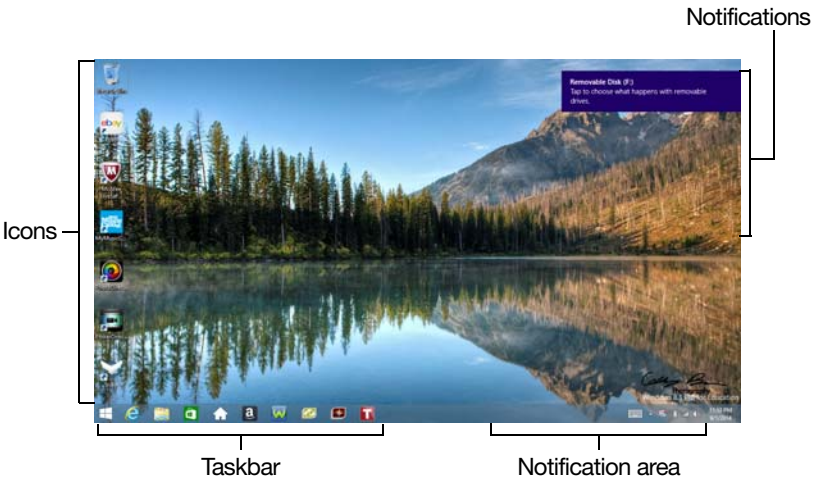
Exploring the desktop

You can use its features to start applications, find documents, set up system components, and perform most other computing tasks.

HINT: The illustrated examples in this guide may appear slightly different from the screens displayed by your system. The differences are not significant and do not indicate any change in the functionality of your system.

Finding your way around the desktop

Your computer's desktop includes several standard features: icons, taskbar, notification area, notifications, and background pattern.



(Sample Image) Windows® Desktop screen

Icons

An icon represents a folder, file, or program that can be quickly activated by double-clicking or touching the icon.

You can create a new desktop icon for any folder, file, or program by dragging the element's icon from its location in a window to the desktop area.

You may see various icons displayed on your system desktop, for example:

Recycle Bin—Holds files you have deleted. You may be able to retrieve these files until you empty the Recycle Bin.

- TECHNICAL NOTE: If you delete a large number of files or very large files from the internal storage drive, there may be insufficient space available in the Recycle Bin to hold these files. In this case, Windows® will prompt you to either permanently delete the file(s) or cancel the deletion.
- If you delete a file (of any size) from an external media or flash media, it does not go into the Recycle Bin. The file is permanently deleted.
- Permanently deleted files cannot be recovered from the Recycle Bin.

For more information on the Recycle Bin, see Windows® online Help.

NOTE If you place the pointer over an icon, a popup description of the file contents appears.

Your desktop may contain other icons depending on your configuration. See Windows® online Help for more specific information on each icon and how to use it, or see "Help file" on page 134.

Taskbar

Each time you open a program, an icon associated with that program appears on the taskbar. With some programs, an icon appears on the taskbar for each document or window you open. You can use these icons to quickly switch between the programs or windows.

To make a program or window the currently active one, click or touch the associated taskbar icon.

Notification area

The notification area displays icons of tasks or programs that run continuously in the background and displays notifications. To learn more about each task, position the pointer over the icon for a few moments and a short description of the task appears.

Typical tasks in the notification area are Current time, Power usage mode, network connectivity status, and speaker volume.

To activate a specific task, click or touch the appropriate notification area icon.

Notifications

There are many types of notifications you can employ to help you with the many tasks you perform every day.

User experience notifications can be set for toast, tile, badge, and raw notifications.

Toast notifications—Designed for time-sensitive delivery of personalized content, such as an instant message from a friend.

Tile notifications—Used by applications that are not currently running with an at-a-glance characteristic, giving you a quick preview of the subject line of your latest email or the current weather conditions.

Badge notifications—A specialized type of tile notification (shown on the Start screen tile) using glyphs to indicate the number of applications that have updates available or the status of a running application.

Raw notifications—These run a background task on behalf of an application while that application is not running in order to make available the latest content, such as an online newspaper.

Windows® Store

Although many applications will be pre-installed or built-in to your computer, you will also have the ability to download many other applications with a touch or the click of your mouse.

While in the Desktop screen, locate the **Windows® Store** () icon in the taskbar.

In the Windows® Store you can search for and browse thousands of apps, all grouped into easy to find categories.

Setting up for communications

To connect to the Internet you need:

- A browser or communications program
- An Internet Service Provider (ISP) or online service if you plan to use the Internet
- A way to connect to the ISP (for example Wi-Fi®/broadband connection, etc.)

Connect to the Internet

NOTE Wireless connectivity and some features may require you to purchase additional software, external hardware or services. Availability of public wireless LAN access points may be limited.

Follow the steps below to set up your Wireless connection.

1. Move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear, click the **Settings** (⚙) charm.
2. Click or touch the **Wi-Fi** (📶) icon.

   The Networks screen appears.
3. Select your network.
4. Click or touch **Connect**.
5. Enter the network security key (if applicable).
6. Click or touch **Next**.

   Your computer should then be connected.

NOTE To enable or disable wireless communication, use the F12 key. For more information see "TOSHIBA Function Keys" on page 133.

NOTE When Airplane mode is OFF, the wireless indicator light (📡) will be lit.

For help with common Wi-Fi® networking problems, see "Wireless networking problems" on page 124.

Connecting your computer to a network

You can connect your computer to a network to increase its capabilities and functionality.

Accessing a network

For specific information about connecting to the network, consult your network administrator. Many hotels, airports, and offices offer Wi-Fi® access.

Exploring audio features

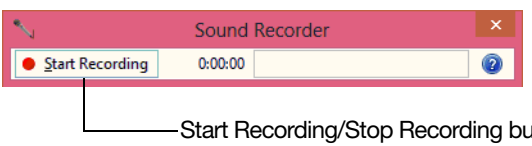
You can use your computer to record sounds using the computer's internal microphones (available on certain models) or an optional external microphone. You can listen to sound files or audio CDs using the built-in speakers, headphones, or external speakers.

Recording sounds

You may record sounds using the computer's internal microphones (available on certain models) or by connecting an optional external microphone.

Using a microphone

1. If you want to use an external microphone, connect it to the computer.
2. From the Start screen begin typing **Sound Recorder** and click or touch your selection. If you are in the Desktop, press the **Windows®** (⊞) key to display the Start screen. Click or touch the **Search** (🔍) icon at the upper-right corner of the screen and, in the Search field, type **Sound Recorder**.



(Sample Image) Sound Recorder screen

3. Click or touch the **Start Recording** button.
4. Speak normally into the microphone.

5 When you have finished recording, click or touch the **Stop Recording** button.

The **Save As** dialog box appears.

6 To save the file, type a file name, and then click or touch **Save**.

Using external speakers or headphones

Your computer is equipped with a full stereo sound system with internal speakers. Instead of using the internal speakers, you can connect headphones or a pair of external stereo speakers.

CAUTION Before putting on headphones to listen, turn the volume down. Do not set the volume too high when using headphones. Continuous exposure to loud sound can harm your hearing.

TECHNICAL NOTE: When using amplified speakers, use speakers that require an external power source. Other types of speakers will be inadequate to produce sound from the computer.

To play back sound files through external speakers or headphones:

1 Locate the headphone jack on the computer.

2 Using any necessary adapters, plug the cable from the headphones or external speakers into the headphone jack.

The headphone jack requires a 16-ohm stereo mini connector.

To adjust the volume:

- For external speakers, use the volume controls on each speaker.
- For headphones, use the computer's volume control.

Using the Web Camera

(Available on certain models.)

Your computer may come with a built-in Web Camera. With this Web Camera you can do the following:

- Take pictures and record videos with your computer
- Chat with others and have them see you while using instant messaging (IM) programs
- Have video conference calls

NOTE To email, instant message or video conference, you must be connected to the Internet.

Depending on your computer model, the process of sending email, taking pictures or recording video messages may vary.

To access the Web Camera, from the Start screen, click or touch the **Camera** tile. The Web Camera indicator light glows when the Web Camera is active.

NOTE When the Web camera is not active the indicator light is off.

Using the Memory card reader

The Memory card reader supports the use of Secure Digital™ (SD™, SDHC™, SDXC™), miniSD™, microSD™, or MultiMediaCard® (MMC®) media. These media can be used with a variety of digital products: digital music players, cellular phones, PDAs, digital cameras, digital video camcorders, etc.

CAUTION To use a microSD™ Card or miniSD™ Card, an SD™ adapter is required.

The Memory card reader may also support other types of media.

NOTE Do not use the Copy Disk function for this type of media. To copy data from one media to another, use the drag-and-drop feature of the Windows® operating system.

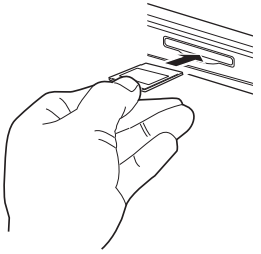
Inserting memory media

NOTE To locate your Memory card reader, please refer to your Quick Start document.

The following instructions apply to all types of supported media devices.

1 Turn the media so that the contacts (metal areas) are face down.

2 Push the media into the adapter until it stops.



(Sample Illustration) Inserting memory media

CAUTION When inserting memory media, do not touch the metal contacts. You could expose the storage area to static electricity, which can destroy data.

NOTE Always remove memory media when not in use.

Removing memory media

1 If you are not currently on the Desktop, choose the **Desktop** tile on the Start screen, otherwise skip to step 2.

2 Prepare the card for removal by clicking on or touching the **Show hidden icons** button (▲), if necessary, in the notification area and then selecting the **Safely Remove Hardware and Eject Media** icon.

3 Highlight, and then click or touch the item you would like to eject.

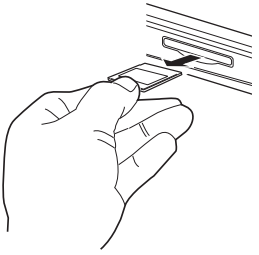
If the system is unable to prepare the media for safe removal, a message will tell you to try again later. If the media can be removed now, the system displays **Safe to Remove Hardware**.

If the computer has a spring-loaded adapter slot, see step 4; otherwise, skip to step 5.

4 Gently press the card inward to release it.

The card pops out slightly.

5 Grasp the card and pull it straight out.



(Sample Illustration) Removing memory media

CAUTION Do not remove memory media while data is being written or read. Even when the Windows® message "copying..." disappears, writing to the media might still be in progress and your data could be destroyed. Wait for the indicator light to go out.

Chapter 5

Utilities

Your computer includes several utilities designed to help you to reconfigure your system to best meet your individual needs. Together, these allow you to ascertain certain system details, set additional options, or change default options. These utilities are described in this chapter.

NOTE The utilities described in this chapter, and the icons shown in the sample images are applicable only if the related utility is available on your system.

- eco Utility®
- Supervisor password
- User password
- System Settings
- Function Key
- Recovery Media Creator
- Service Station
- TOSHIBA Application Installer

eco Utility®

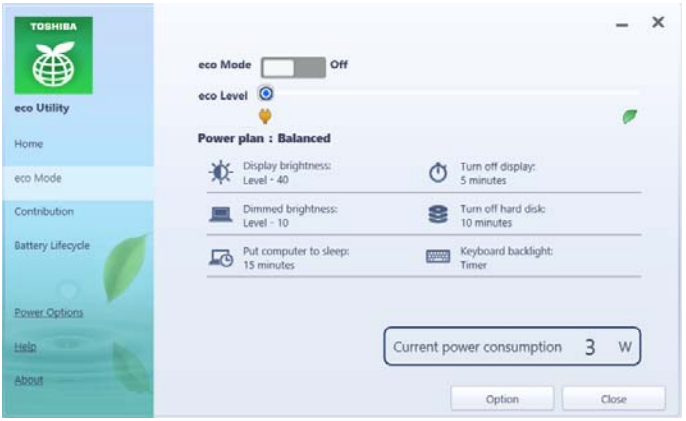
The eco Utility® monitors your power savings from using the eco power plan by tracking real-time power consumption and accumulated savings over time.

To access the eco Utility®:

1 From the Start screen begin typing **eco Utility**.

2 Click or touch **eco Utility**.

The eco Utility® window appears.



(Sample Image) eco Utility® window

3 To activate the eco power plan, select **eco Mode** on the left side.

4 Click or touch the **eco Mode** button.

5 Click or touch **Close**.

For more information on the eco power plan and utility, click or touch the **Help** button at the bottom of the window.

Password Utility

Setting a password lets you walk away from your computer while providing additional protection for your files. When you set a password, you must enter the password before you can work on your computer again.

TOSHIBA supports different types of passwords on your computer:

- A supervisor password—Prohibits unauthorized users from accessing certain functions such as System Settings. This is useful if more than one person uses the computer.
- A user password—Prevents unauthorized users from starting the computer.

When setting up passwords, keep the following in mind:

- The supervisor password must be set before the user password, or the user password must be deleted and then re-entered after the supervisor password is set.
- The user password can be set up under the supervisor password.

Using a supervisor password

A supervisor password prevents other users from changing hardware configuration options.

Setting a supervisor password

CAUTION If you choose to set a supervisor or user password, TOSHIBA strongly recommends that you save your password in a location where you can later access it should you not remember it.

TOSHIBA is not responsible for any losses that may occur to you, your organization or others as a result of the inability to access your computer.

To set a supervisor password:

1 To access Supervisor Password from the Start screen begin typing **Password Utility**.

2 Click or touch **Password Utility**.

(Sample Image) Supervisor Password tab

3 Click or touch **Supervisor Password**.

4 Click or touch **Set**.

5 Enter your password, and then enter it again to verify.

6 Click or touch **Set**.

NOTE Under User Policy, this option may or may not ask for password verification.

7 Click or touch **OK** to save your password as a text file.

NOTE Password Utility will suggest “memo.txt” for the text file name. If you have saved a password previously, using the same name may overwrite your password text file with the new password. By using a different name, you can prevent overwriting your previously stored passwords.

8 Click or touch **Save**.

9 Click or touch **OK**.

Deleting a supervisor password

To delete a supervisor password:

1. To access Supervisor Password from the Start screen begin typing **Password Utility**.
2. Click or touch **Password Utility**.

   A pop-up screen appears asking for a password.
3. Enter your password, and then click or touch **Verify**.
4. Click or touch **Supervisor Password**.
5. Click or touch **Delete**.

   An authority verification pop-up screen appears.
6. Click or touch **Delete**.
7. Enter the password, and then click or touch **Verify**.
8. Click or touch **OK** to exit.

Using a user password

A user password provides power-on password protection.

Setting a user password

CAUTION If you choose to set a supervisor or user password, TOSHIBA strongly recommends that you save your password in a location where you can later access it should you not remember it.

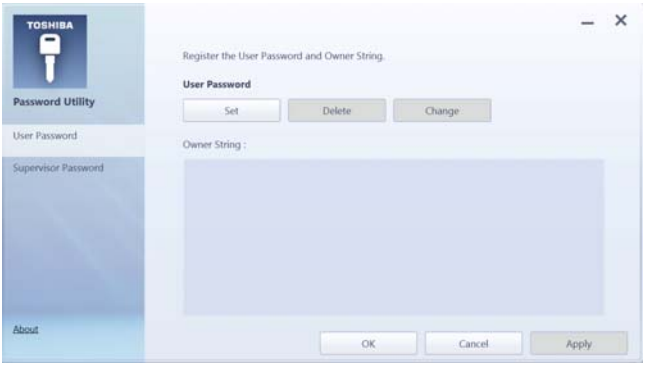
TOSHIBA is not responsible for any losses that may occur to you, your organization or others as a result of the inability to access your computer.

To register a password for the power-on password functions:

1 To access User Password from the Start screen begin typing **Password Utility**.

2 Click or touch **Password Utility**.

3 Click or touch **User Password**.



(Sample Image) User Password tab

4 Click or touch **Set**.

5 Enter your password, and then enter it again to verify.

6 Click or touch **Set**.

7 Click or touch **OK** to save your password as a text file.

NOTE Password Utility will suggest “memo.txt” for the text file name. If you have saved a password previously, using the same name may overwrite your password text file with the new password. By using a different name, you can prevent overwriting your previously stored passwords.

8 Click or touch **Save**.

9 Click or touch **OK**.

Deleting a user password

To cancel the power-on password function:

1. To access User Password from the Start screen begin typing **Password Utility**.
2. Click or touch **Password Utility**.

   A pop-up screen appears asking for a password.
3. Enter your password, and then click or touch **Verify**.
4. Click or touch **Delete**.

   An authority verification pop-up screen appears.
5. Click or touch **Delete**.
6. Enter the password, and then click or touch **Verify**.
7. Click or touch **OK** to exit.

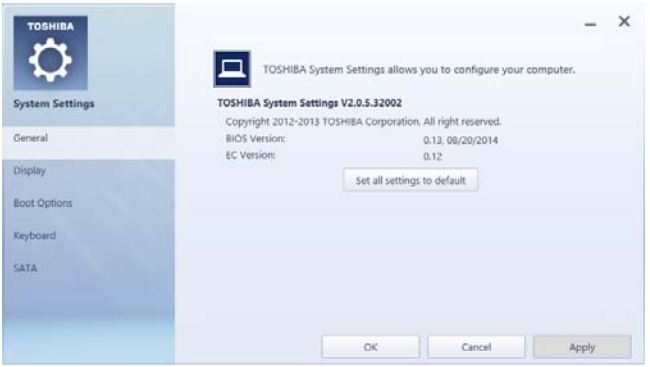
System Settings

System Settings is the TOSHIBA configuration management tool available through the Windows® operating system. To access it:

1 To access System Settings from the Start screen begin typing **System Settings**.

2 Click or touch **System Settings**.

The System Settings screen appears.



(Sample Image) System Settings screen – General tab options

The System Settings screen may have the following tabs:

- **Boot Options**—Allows you to change the sequence in which your computer searches the drives for the operating system
  - **Boot Priority**—Allows you to configure boot priority settings.
  - **Panel open/Power on**—Allows you to turn on the computer when opening the display panel while the computer is turned off.

- **Display**—Allows you to change various default settings for the built-in display

NOTE When the computer restarts, it remembers the last configuration. If data does not appear on the display you are using after starting in Sleep mode, press the (⊞) + P keys to toggle the display. For more information, see "Directing the display output when you turn on the computer" on page 60.

- **General**—Allows you to view the current BIOS version or change certain settings back to their default values
- **Keyboard**—Allows you to access the wake-on keyboard function, or to configure the function keys
- **SATA**—Allows you to set conditions for SATA

Function Key

NOTE The Function option is disabled by default.

TOSHIBA Function Key enables you to activate functions by pressing specific keys either singly or in combination with Fn. Some functions show the toast notification at the edge of the screen. These settings turn notifications ON/OFF.

1. To access Function Key from the Start screen begin typing **Function Key**.
2. Click or touch **Function Key**.

   The Function Key screen appears.

(Sample Image) Function Key

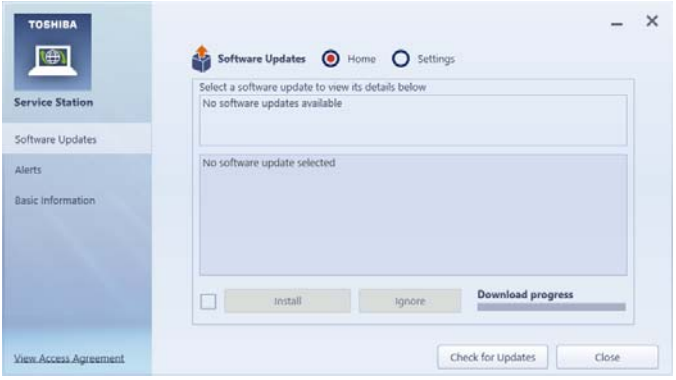
3. Slide the ON/OFF switch to enable/disable the notification.
4. Click or touch **Close**.

Recovery Media Creator

The Recovery Media Creator utility enables you to create recovery media that can be used to return your system to its out-of-box state, if necessary. For detailed information on using the utility to create recovery media, see “Creating recovery media” on page 45.

Service Station

The Service Station helps you keep your new computer running at its best by notifying you when updated software, firmware, documentation or other information is available for your computer.



(Sample Image) Service Station

The Service Station will alert you when updates are available, and you can then choose to install the updates if you wish.

TOSHIBA Application Installer

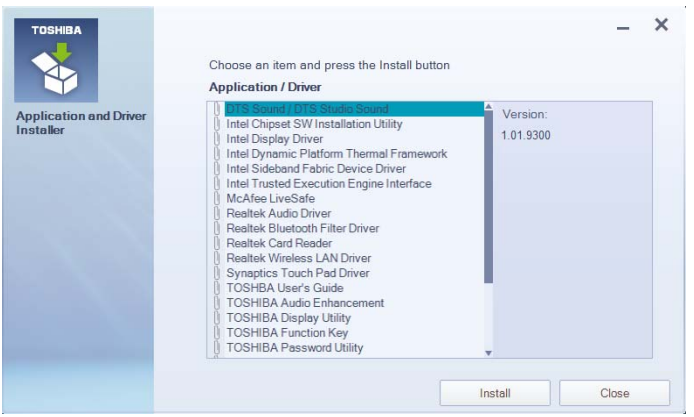
The TOSHIBA Application Installer allows you to reinstall the drivers and applications that were originally bundled with your computer.

NOTE You must have an Internet connection to reinstall applications.

To reinstall drivers and applications:

1. To access TOSHIBA Application Installer from the Start screen begin typing **Application Installer**.
2. Click or touch **TOSHIBA Application Installer**.

   The TOSHIBA Application Installer window appears.



(Sample Image) TOSHIBA Application Installer selection screen

3. Click or touch the item you want to install.
4. Click or touch **Install**, then follow the on-screen prompts to complete the installation process.

Chapter 6

If Something Goes Wrong

Some problems you may encounter when using your computer are relatively easy to identify and solve. Others may require help from your network administrator or the manufacturer of the software program.

This chapter aims to help you solve many problems by yourself. It covers the problems you are most likely to encounter.

If all else fails, contact Toshiba. You will find information on Toshiba's support services at the end of this chapter.

Problems that are easy to fix

Your program or application stops responding.

NOTE The operating system allows for the use of both applications ("Apps" used with the Windows® "Modern UI") and programs (used in the traditional Windows® desktop environment). For the purpose of simplifying the information we will use the terms interchangeably in this chapter.

If you are working in a program that suddenly freezes, chances are the program has stopped responding. You can exit the program without shutting down the operating system or closing other programs.

To close a program that has stopped responding:

1 Press Ctrl, Alt, and Del simultaneously (once), and then click or touch **Task Manager**.

   The Task Manager window appears.

2 Select the program or application you want to close, and then click or touch **End Task** in the lower right corner.

   Closing the failed program should allow you to continue working. If it does not, continue with the next step.

3 Close the remaining programs one by one by selecting the program name, then select **End Task**.

   Closing all programs should allow you to continue working. If it does not, power off your computer, and then restart it.

Problems when you turn on the computer

These problems may occur when you turn on the power.

The computer will not start.

Make sure you attached the AC adaptor and power cord/cable properly.

Press and hold the power button for at least 10 seconds.

If you are using the AC adaptor, check that the wall outlet is working by plugging in another device, such as a lamp.

Verify that the computer is on by looking at the Power button. If the button is glowing, the computer is on. If the button is not lit, try turning the computer off and then on again.

If you are using an AC adaptor, verify that the computer is receiving power from the external power source by checking the AC power light located on the front edge of the computer. If the indicator is glowing, the computer is connected to a live external power source.

The computer displays the WARNING RESUME FAILURE/Windows Error Recovery – Windows did not shut down successfully message.

To continue, select **Start Windows normally**. This can happen if the computer was put into Sleep mode and the battery has discharged. If you performed a shutdown before this message was displayed, a program or driver may have prevented Windows® from shutting down.

Data stored in the computer's memory has been lost. Data stored in the computer's internal storage drive may not be affected.

Always save your data even when you are using Sleep mode. If your battery fully discharges, information that has not been saved will be lost. Your computer can be configured to warn you when the battery is running low see "What to do when the main battery runs low" on page 79.

If you are running on battery power, it is recommended that you do not leave the computer in Sleep mode for long periods of time.

To charge the battery, leave the computer plugged into a live wall outlet for several hours. For more information see "Charging the main battery" on page 75.

The AC power light is blinking.

If the AC power light is blinking, try the following steps:

1. Connect the AC adaptor to a different power outlet, preferably in a different room. If the computer starts normally, there may be a problem with the AC outlet itself, or the voltage level available from it.
2. Verify that the AC adaptor is the correct unit for your computer model. The computer may not be able to start from an AC adaptor that is rated for less current (amperage) than the computer requires, even if the rated voltage is correct, and the plug fits correctly in the DC-IN socket. The labels on the bottom of the computer and the AC adaptor show the specifications for voltage ("V") and current ("A") for each device. The voltage level must match exactly. The amperage rating of the AC adaptor must be equal to or greater than that required by the computer.

3 If your computer has a removable battery, connect the AC adaptor to the computer. Leave the battery out of the computer. Try turning the computer on again.

   If the computer starts normally, the battery may need charging, may be depleted, or may be defective. Turn the computer off, insert the battery, turn the computer on, and then leave the computer running for several hours, which will deliver a slow, steady "trickle-charge" to the battery. Once the battery has been trickle-charged, it may begin working correctly again.

If the trickle-charging does not prove effective, you can connect to Support Online by going to Toshiba support at support.toshiba.com.

The battery light is blinking when the computer is on.

If the battery light is blinking when the computer is on, this indicates a power mismatch. Do the following:

1 Check the OUTPUT specifications on the AC adaptor (for example, DC 19V – 3.95A)

2 Check the INPUT specifications on the bottom of the computer.

   The output specifications of the AC adaptor must match the input specifications of the computer.

3 If the specifications do **not** match, locate and use the AC adaptor that shipped with your computer. If the specifications **do** match, contact Toshiba. See "Contacting Toshiba" on page 131.

The Windows® operating system is not working

Once you are familiar with your computer and used to the way the operating system responds to your work routine, you can easily detect if the operating system is not working correctly. For example:

- The operating system fails to start after the initial startup appears.
- The operating system takes a long time to start.
- The operating system responds differently from the normal routine.
- The screen does not look right.

Unless a hardware device has failed, problems usually occur when you change the system in some way such as installing a new program or adding a device.

If you experience any of these problems, use the options in the Startup menu to fix the problem.

Using Startup options to fix problems

If the operating system fails to start properly, you may need to troubleshoot the Operating System and/or its settings. There are several options to choose from depending on the severity of the problem and your level of expertise with computers.

If Windows® fails to start properly twice, the Windows® Boot menu will launch. To enter the Advanced Startup options manually:

1. From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge.
2. When the Windows® charms appear, click or touch the **Settings** (⚙) charm.
3. Click or touch **Change PC Settings**.
4. Click or touch **Update and recovery**.
5. Click or touch **Recovery**.
6. Click or touch **Restart Now** under **Advanced Startup**.

   The computer restarts.
7. Click or touch **Troubleshoot** from the menu.

You now have several options:

Refresh your computer

- Your files and personalization settings won't change
- Your computer settings will be changed back to their defaults
- Your Apps from the Windows® Store are retained
- Apps you installed from discs or Web sites are removed
- A list of removed apps is saved to your desktop

For more information, see "Refresh your PC (with user's data)" on page 49.

Reset your computer

- All of your personal files and apps are removed
- Your computer settings are changed back to their defaults

For more information, see "Reset your PC" on page 51.

Advanced options

Choosing this option presents you with another set of options:

System Restore

- System Restore allows you to use a Restore point to return the computer to a state at which it was performing properly. Restore points may be created:
  - When new hardware or software is installed
  - Manually by the user

System Image Recovery

Windows® will "Recover" the Operating system using a specific image provided by the user.

Startup Repair

This feature automates the repair process. The Operating System will automatically look for problems and repair them if possible.

Command Prompt

The command prompt is a very powerful tool for advanced users.

Startup Settings

In previous Operating Systems the majority of the options found on this menu were available by pressing the F8 key during the Windows® boot process:

- Enable low resolution video mode

  Restarts Windows® using your current video driver at low resolution. This allows you to reset your display settings in the event they have been improperly set.

- Enable debugging mode

  Starts Windows® in an advanced troubleshooting mode

- Enable boot logging

  Creates a file that lists all the drivers that are installed during startup

- Enable Safe Mode

  Starts Windows® with a minimal set of drivers and services. If the computer starts and runs in Safe Mode, you will know the Operating System is most likely working properly and that you should look to third-party applications or drivers for the source of your problem.

- Disable driver signature enforcement

  Allows drivers containing improper signatures to be installed

- Disable early-launch anti-malware protection

  Allows drivers to initialize without being measured by the Anti-malware driver

- Disable automatic restart on system failure

  Prevents Windows® from automatically restarting if an error causes it to fail. Choose this option only if Windows® is stuck in a loop where it fails, attempts to restart, and fails again repeatedly.

Internet problems

My Internet connection is very slow.

Many factors contribute to the speed with which you can surf the Internet. They include: network speed, network conditions, time of day (when everyone else is surfing, your access can be slow) and popularity of the sites you are trying to access. If accessing a particular site is very slow, try later.

My browser cannot find the URL address I typed in.

Make sure you separated the domain names of the address with the forward slash (/). Check the spelling of each name and the syntax of the address carefully. A single incorrect letter or missed character will make it impossible for your browser to locate the site.

My browser cannot find a site I bookmarked.

The World Wide Web is constantly changing. A site you bookmarked yesterday may not be available today or its server may be down for temporary repair. Try again later.

The Windows® operating system can help you

If the operating system has started properly but you still have a problem using your computer, the online Help can assist you in troubleshooting the problem. Getting to the online Help will differ depending on which interface you are in:

- **Start screen**—Type **Help and Support**

NOTE As soon as you begin typing, the search feature automatically begins.

- **Desktop**—Press the F1 key

When the "Windows Help and Support" screen appears, do one or both of the following:

- In the open search field type the topic you need help with and follow the on-screen instructions
- Click or touch one of the options listed in the window and follow the instructions

You can connect to Support Online by going to Toshiba support at support.toshiba.com.

Fixing a problem with Device Manager

Device Manager provides a way to check and change the configuration of a device.

CAUTION Changing the default settings using Device Manager can cause other conflicts that make one or more devices unusable. Device Manager is a configuration tool for advanced users who understand configuration parameters and the ramifications of changing them.

Checking device properties

Device Manager provides a way to view the properties of a device. Properties include the name of the manufacturer, the type of device, the drivers installed, and the system resources assigned to the device.

To check a device's properties:

1. From the Start screen, type **Device Manager**.

2 Click or touch **Device Manager**.

The Device Manager screen appears.

3 From the list of device(s), double-click or touch the device type.

4 To view the device(s) installed, double-click or touch the device.

The operating system displays the device Properties dialog box, which provides an array of tabs. They may include:

- The **General** tab, which provides basic information about the device.
- The **Resources** tab, which lists resources assigned to the device. This tab does not appear if the device is not using resources.
- The **Driver** tab, which displays the drivers being used by the device. This tab also provides options for updating the driver or rolling back the driver in case the new version is causing a problem.

The tabs that appear in the dialog box vary from one device to another.

For more information about Device Manager, refer to Windows® online Help.

Power and the battery

NOTE The computer battery may not be accessible by the user.

Your computer receives its power through the AC adaptor and power cord/cable or from the system battery. Power problems are interrelated. For example, a faulty AC adaptor or power cord/cable will neither power the computer nor recharge the battery.

Here are some typical problems and how to solve them:

The AC power light does not come on when you plug in the AC adaptor and power cord/cable.

Make sure the AC adaptor and power cord/cable are firmly plugged into both the wall outlet and the computer.

If the AC power light still does not come on, check that the wall outlet is working properly by plugging in a lamp or other appliance.

The AC adaptor and power cord/cable work correctly, but the battery will not charge.

The battery does not charge while the computer is consuming full power. Try turning off the computer.

The battery may be too hot or too cold to charge properly. If you think this is the probable cause, let the battery reach room temperature and try again.

If the battery has completely discharged, it will not begin charging immediately. Leave the AC adaptor and power cord/cable connected, wait 20 minutes and see if the battery is charging.

If the battery light is glowing after 20 minutes, let the computer continue charging the battery for at least another 20 minutes before you turn on the computer.

If the battery light does not glow after 20 minutes, the battery may have reached the end of its useful life.

The battery appears not to power the computer for as long as it usually does.

If you frequently repeat shallow charge and discharge, the battery meter may become inaccurate. Let the battery discharge completely, then try charging it again.

Check the power options via your Power Plans (see "Power Plans" on page 81). Have you added a device that takes its power from the battery? Is your software using the internal storage drive more? Is the display power set to turn off automatically? Was the battery fully charged to begin with? All these conditions affect how long the charge lasts.

After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries. To purchase a new battery pack, see your accessories information included with your computer, or visit the Toshiba Web site at accessories.toshiba.com. Refer to this site often to stay current on the most recent software and hardware options for your computer, and for other product information.

For more information on maintaining battery power, see "Changing the main battery" on page 83.

Keyboard problems

NOTE To capture a print screen of the entire screen, press the Fn + PRTSC key. (This only applies to models with a 10-key keypad.)

To capture only the active window displayed, press Fn + ALT while simultaneously pressing the PRTSC key.

You have connected an external keyboard and the operating system displays one or more keyboard error messages.

You may need to update your keyboard driver. Refer to the documentation that came with the keyboard or to the keyboard manufacturer's Web site.

The keyboard you connected may be defective or incompatible with the computer. Try using a different make of keyboard.

Display problems

Here are some typical display problems and their solutions:

The screen is blank.

Display Auto Off may have gone into effect. Press any key to activate the screen.

If you are using the built-in screen, make sure the display priority is not set for an external monitor. To do this, press F4. If this does not correct the problem, press F4 again to return the display priority to its previous setting.

HINT: Pressing the F4 key several times will advance you through the display options.

If you are using an external monitor:

- Check that the monitor is turned on.
- Check that the monitor's power cord/cable is firmly plugged into a working power outlet.
- Check that the cable connecting the external monitor to the computer is firmly attached.

- Try adjusting the contrast and brightness controls on the external monitor.
- Press F4 to make sure the display priority is not set for the built-in screen.

The screen does not look correct.

Choose a theme for your desktop background, under **Change the visuals and sounds on your computer**, in the **Themes** panel. You can also change the setting for individual components separately by selecting an item from just below the **Themes** panel (**Desktop Background**, **Color**, **Sounds**, and **Screen Saver**).

For more information, see the Windows® online Help.

A message displays saying that there is a problem with your display settings and that the adapter type is incorrect or the current settings do not work with your hardware.

Reduce the size of the color palette to one that is supported by the computer's internal display.

To change the display properties:

1. Right-click or touch & hold in a blank area of the Windows® desktop.
2. Click or touch **Personalize**, and then **Display**.
3. Use the menu on the right hand side of the page to:
   - Adjust resolution
   - Adjust brightness
   - Calibrate color
   - Change display settings
   - Project to a second screen
   - Adjust ClearType text
4. Click or touch **OK**.

The display mode is set to Simultaneous and the external display device does not work.

Make sure the external monitor is capable of displaying at resolutions of 1280 x 800 or higher. Devices that do not support this resolution will only work in Internal/External mode, and not simultaneous mode.

Disk or storage drive problems

Problems with the storage drive or with external media usually show up as an inability to access the drive or as sector errors. Sometimes a drive problem may cause one or more files to appear to have garbage in them.

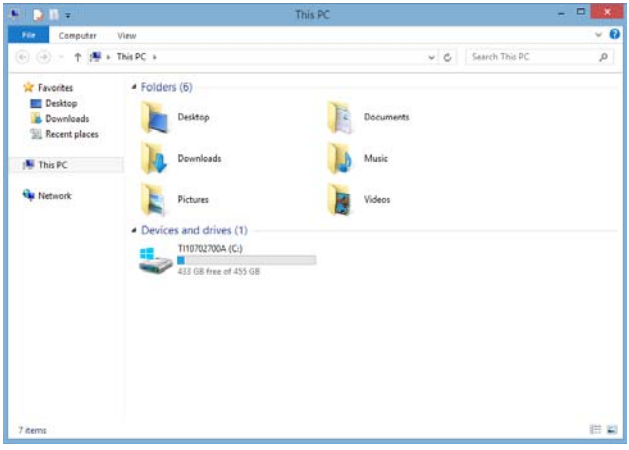
Error-checking

NOTE This feature is not available for optical disc drives.

Run Error-checking, which analyzes the directories and files on the storage drive and repairs any damage it finds.

To run Error-checking:

1. From the Start screen, type **computer**.
2. Click or touch **This PC** from the list that appears.
3. Right-click or touch the drive you wish to check.



(Sample Image) Clicking on or touching the drive

4. In the pop-up menu, click or touch **Properties**.

   The drive's Properties box appears.
5. Click or touch the **Tools** tab.
6. Click or touch the **Check** button.

   The Error Checking box appears.

   The system will alert you if you need to scan the drive.

7 Even if you do not need to scan the drive for errors you can scan by clicking or touching **Scan drive**.

Error-checking tests and repairs the storage drive.

Your hard disk seems very slow.

If you have been using your computer for a long time, your files may have become fragmented. Run Disk Defragmenter.

To do this:

1 From the Start screen begin typing **Defragment** and click or touch your selection. If you are in the Desktop, press the **Windows®** (⊞) key to display the Start screen. Click or touch the **Search** (🔍) icon at the upper-right corner of the screen and, in the Search field, type **Defragment**. In the list that appears, click or touch your selection.

2 Click or touch **Defragment and Optimize Drives**.

3 From the Optimize Drives menu click or touch the drive you wish to defragment.

4 Click or touch the **Optimize** button.

The system will display the status as it optimizes and defragments the drive.

Your data files are damaged or corrupted.

Refer to your software documentation for file recovery procedures. Many software packages automatically create backup files.

You may also be able to recover lost data using utility software. Consult your network administrator.

Some programs run correctly but others do not.

This is probably a configuration problem. If a program does not run properly, refer to its documentation and check that the hardware configuration meets its needs.

Sound system problems

No sound is coming from the computer's speakers.

Adjust the volume control.

Try pressing the F11 key to see if volume mute is disabled.

Check that the volume control on the computer is turned up.

If you are using external headphones or speakers, check that they are securely connected to your computer.

The computer emits a loud, high-pitched noise.

This is feedback between the microphone and the speakers. It occurs in any sound system when input from a microphone is fed to the speakers and the speaker volume is too loud. Adjust the volume control.

Printer problems

This section lists some of the most common printer problems.

The printer will not print.

Check that the printer is connected to a working power outlet, turned on and ready (on line).

Check that the printer has plenty of paper. Some printers will not start printing when there are just two or three sheets of paper left in the tray.

Make sure the printer cable is firmly attached to the computer and the printer.

Run the printer's self-test to check for any problem with the printer itself.

Make sure you installed the proper printer drivers as shown in the instructions that came with the printer.

You may have connected the printer while the computer is on. Disable Sleep mode, turn off the computer, and turn off the printer. Turn the printer back on, make sure it is online, and then turn the computer back on.

Try printing another file. For example, you could create and attempt to print a short test file using Notepad. If a Notepad file prints correctly, the problem may be in your original file.

If you cannot resolve the problem, contact the printer's manufacturer.

The printer will not print what you see on the screen.

Many programs display information on the screen differently from the way they print it. See if your program has a print preview mode. This mode lets you see your work exactly as it will print. Contact the software manufacturer for more information.

Wireless networking problems

NOTE This section provides general troubleshooting tips for networking problems, specifically wireless (Wi-Fi®) networking.

The terms and concepts used assume a basic understanding of networks, and may be for more advanced users. If you need assistance or if you are not familiar with the terminology, please see Windows® Help and Support or contact your computer technician.

- If your computer is equipped with an internal Wi-Fi® adapter, verify that Airplane mode is OFF (the wireless indicator light will be lit).
- Verify that your computer can detect access points or routers. If it can detect a Wi-Fi® access point or router then it may be a configuration issue.
- Verify that signal strength is good using the utility provided with the Wi-Fi® adapter.
- If another computer is on the same network, verify that it has network access, and can connect to the Internet. If, for example, the other computer cannot browse to a public Web site, the ISP's (Internet Service Provider) service may be disrupted.
- Verify that the Service Set Identifier (SSID), or network name, is correct - i.e., that it matches the SSID assigned to the access point you are attempting to connect through. SSIDs are case-sensitive.
- Check the Windows® Control Panel's Device Manager to verify that the Wi-Fi® adapter is recognized by the Windows® operating system, and that the driver is loaded. To access the Device Manager, from the Start screen begin typing **Control Panel** and click or touch your selection. If you are in the Desktop screen, press the **Windows®** ( ) key to display the Start screen. Click or touch the **Search** ( ) icon at the upper-right corner of the screen and, in the Search field type **Control Panel**. Click or touch **Control Panel**, select **System and Security**, and then **System**. Launch the Device Manager and carefully note any error messages - these will be very helpful if you should confer with a support technician at a later time.

NOTE To enable or disable wireless communication, use the F12 key. For more information see "TOSHIBA Function Keys" on page 133.

- Use IPCONFIG to verify that the computer has a useful IP address - one other than the private address of 169.254.xxx.xxx assigned by Windows®.

  1. From the Start screen, type **Cmd**.
  2. Click **Command Prompt**.
  3. Enter **IPCONFIG/ALL**, and then press **ENTER**.

  The IP address for each active network adapter will be displayed.

- Connect your computer directly to your router or broadband modem, by plugging a standard CAT5 Ethernet patch cable (sold separately) into your computer's RJ45 Ethernet port. If your connection problem disappears, the problem lies in the Wi-Fi® part of your network.
- If you have enabled any security provisions (closed system, MAC address filtering, Wired Equivalent Privacy [WEP], etc.), check the access point vendor's Web site for recent firmware upgrades. Problems with WEP keys, in particular, are frequently addressed in new firmware releases.

Develop good computing habits

Save your work frequently.

You can never predict when your computer will lock, forcing you to close a program and lose unsaved changes. Many software programs build in an automatic backup, but you should not rely solely on this feature. Save your work! See "Computing tips" on page 64 for instructions.

On a regular basis, back up the information stored on your internal storage drive.

Use Windows® to back up files, or the entire computer, to an optical disc, or external hard disk. Here are some ways you can do this:

- Use the Windows® operating system to back up files or your entire computer to an optical disc, or external hard disk.

- Copy files to a rewritable external storage device.
- Connect your computer to the office network and copy files to your network partition.

Some people use a combination of these methods, backing up all files weekly and copying critical files to external media on a daily basis.

If you have installed your own programs, you should back up these programs as well as your data files. If something goes wrong that requires you to reformat your internal storage drive and start again, reloading all your programs and data files from a backup source will save time.

Read the documentation.

It is very difficult to provide a fail-safe set of steps you can follow every time you experience a problem with the computer. Your ability to solve problems will improve as you learn about how the computer and its software work together.

Get familiar with all of the documentation provided with your computer, as well as the information that may come with the programs and devices you purchase.

Your local computer store or book store sells a variety of self-help books you can use to supplement the information in the manuals.

Data and system configuration backup in the Windows® operating system

The Windows® operating system offers some easy-to-use features for backing up your Windows® settings and your data - documents and other important files. Take advantage of these features to protect yourself from much more difficult and time-consuming restoration procedures, and to safeguard your valuable data from loss.

Saving system configuration with restore points

The System Restore feature of the Windows® operating system quickly creates restore points - 'snapshots' of your Windows® operating system configuration - and saves them for later recall. If you experience problems after installing some new hardware or software, you can easily select a previously established Control Point to 'turn back the clock,' restoring the Windows® operating system to the state it was in just prior to the installation. This is much easier and more

effective than uninstalling the hardware or software, which often leaves behind unwanted files and settings. It is also easy to undo a restore point selection, if you change your mind.

Follow these steps to create a restore point using the System Restore utility:

1. From the Start screen, type **Control**. Click or touch **Control Panel** from the list that appears.
2. Click or touch **System and Security**, and then **System**.
3. In the left pane, click or touch **System Protection**.

   The System Protection tab of the System Properties window appears.
4. Click or touch **Configure**.
5. Under **Restore settings** select Turn on **System Protection**.
6. Click or touch **OK**.
7. Click or touch **Create**.
8. In the input field, enter a name that is descriptive enough to be easily understood in the future, such as “Before installing Brand X Accounting app.” Then click or touch **Create**.

   The Windows® operating system creates the restore point, automatically stamps it with the current date and time, and displays a message that the restore point was successfully created.
9. Click or touch **Close**.

Then, at a later time, you can re-establish your Windows® configuration using the saved restore point. To do this:

1. From the Start screen, type **Control**. Click or touch **Control Panel** from the list that appears.
2. Click or touch **System and Security**, and then **System**.
3. In the left pane, click or touch **System Protection**.

   The System Protection tab of the System Properties window appears.

4 Click or touch **System Restore...**

5 Click or touch **Next**.

6 Click or touch the Restore point you want to use then click or touch **Next**.

The time stamp and description of each Restore point is displayed.

NOTE At this point you can click or touch "Scan for affected programs" to determine what the impact of using the chosen Restore Point will be.

7 Verify that the Restore point you chose is the correct one. If it is not, click or touch **Back** to return to the previous step.

8 Close all programs and save all open files.

9 Click or touch **Finish**, and then **Yes** to begin the system restore.

Your Windows® operating system configuration will now be restored to the state it was in when the chosen restore point was created, and then the computer will be automatically restarted.

Backing up your data or your entire computer with the Windows® operating system

The most valuable component of your computer system is the data you create and store on its internal storage drive. Since problems with either hardware or software can make the data inaccessible or even destroy it, the next most valuable component of your computer system may be a recent backup of your data.

Fortunately, the Windows® operating system offers a convenient way to back up your computer or just your important files to optical disc drives, or hard drives. An external hard drive is recommended in case the internal storage drive fails. No additional software is required. Most of the optical disc drives built into recent Toshiba portable computer models can write to (or 'burn') as well as read from optical discs. External optical disc writers are also widely available.

Follow these steps to back up your computer or files to optical discs, or a storage drive:

NOTE You cannot back up the computer while running on battery power. Connect the AC adaptor before continuing.

1. From the Start screen, type **Control**. Click or touch **Control Panel** from the list that appears.
2. Click or touch **Save backup copies of your files with File History** under the **System and Security** heading. Follow the on-screen instructions to back up your files.

For additional Help, while in the Windows® Desktop screen, press the F1 key to launch the Windows® Help and Support screen. Search for "back up files".

General tips for installing hardware and software

Here are a few tips to help ensure safe and easy installation of new hardware (printers, pointing devices, external hard drives, optical disc drive writers, scanners, etc.) and software (applications like Microsoft® Office and Adobe® Photoshop®, or utility software such as special toolbars for your web browser).

- Create a restore point (refer to "Saving system configuration with restore points" on page 126). Before installing anything, use the System Restore utility to set a restore point (see the section titled restore points). If anything goes wrong, you will then be able to easily restore the Windows® operating system to the state it was in prior to the installation, undoing any changes that the installation process introduced.
- Back up your critical data (see "Backing up your data or your entire computer with the Windows® operating system" on page 128).
- Have your back up media on hand in case you need any files from them.

- Do not guess – follow directions carefully! It is often necessary to run an installation utility first – before connecting a new hardware item to the computer. If the device is connected first, it may be very difficult to complete the installation successfully. Always carefully follow the installation instructions that accompany the hardware or software.
- Restart the Windows® operating system. Always restart the Windows® operating system after each installation, even if the installation utility does not prompt you to do so. This will ensure that the installation is completed, and will clean up anything that the installation utility left behind.
- Do one installation at a time. If you have several new items to add to your computer system, install just one at a time, creating restore points immediately before each successive installation. This will make it much easier to determine the origin of any new problems. For best results, follow this sequence:

  1. Back up critical data.
  2. Create a restore point.
  3. Install one item of hardware or software.
  4. Restart the Windows® operating system.
  5. Use the new hardware or software for a while, noting any new problems. Make sure that your critical applications (email, business applications, etc.) are working correctly, and verify that important devices are still functioning.
  6. For each additional hardware or software item, repeat these steps, starting at step 1 if any of your critical data has changed, or starting at step 2 if no critical data has changed.

If you need further assistance

If you have followed the recommendations in this chapter and are still having problems, you may need additional technical assistance.

Since some problems may be related to the operating system or the program you are using, it is important to investigate all sources.

- Review the troubleshooting information in your operating system documentation.

- If the problem occurs while you are running a program, consult the program's documentation for troubleshooting suggestions. Contact the software company's technical support group for their assistance.
- Consult the dealer from whom you purchased your computer and/or program. Your dealer is your best source for current information.

For the detailed specifications for your computer, visit support.toshiba.com.

Contacting Toshiba

Toshiba's Technical Support Web site

For technical support, or to stay current on the most recent software and hardware options for your computer, and for other product information, be sure to regularly check the Toshiba Web site at support.toshiba.com.

Other Toshiba Internet Web sites

toshiba.com	Toshiba corporate site
toshiba.com/us	Marketing and product information in the USA
accessories.toshiba.com	Accessories information in the USA
www.toshiba.ca	Canada
www.toshiba-Europe.com	Europe
www.toshiba.co.jp/index.htm	Japan
latin.toshiba.com	Mexico and all of Latin America
acclaim.toshiba.com	Toshiba USA Self-Service support web site
laptopforums.toshiba.com	Community discussion forums for Toshiba laptop users

Toshiba's worldwide offices

Australia
Toshiba (Australia) Pty. Limited
84-92 Talavera Road
North Ryde NSW 2113
Sydney
Australia

Canada
Toshiba Canada Ltd.
191 McNabb Street
Markham, Ontario
L3R - 8H2
Canada

France
Toshiba Systèmes (France) S.A.
7, Rue Ampère; B. P. 131
92800 Puteaux Cédex
France

Germany
Toshiba Europe GmbH
Leibnizstraße 2
D-93055 Regensburg
Germany

Italy
Centro Direzionale Colleoni
Palazzo Perseo
Via Paracelso 10
20041, Agrate Brianza
Milano, Italy

Japan
Toshiba Corporation, PCO-IO
1-1, Shibaura 1-Chome
Minato-Ku, Tokyo, 105-8001
Japan

Latin America and Caribbean
Toshiba America Information Systems, Inc.
9740 Irvine Boulevard
Irvine, California 92618
United States

Mexico
Toshiba de México S.A. de C.V.
Sierra Candela No.111, 6to. Piso
Col. Lomas de Chapultepec.
CP 11000 Mexico, DF.

Spain
Toshiba Information Systems (España) S.A.
Parque Empresarial San Fernando
Edificio Europa, 1a Planta
Escalera A
28831 (Madrid) San Fernando de Henares
Spain

United Kingdom
Toshiba Information Systems (U.K) Ltd.
Toshiba Court
Weybridge Business Park
Addlestone Road
Weybridge, Surrey KT15 2UL
United Kingdom

United States
Toshiba America Information Systems, Inc.
9740 Irvine Boulevard
Irvine, California 92618
United States

The Rest of Europe
Toshiba Europe (I.E.) GmbH
Hammfelddamm 8
D-4-1460 Neuss
Germany

For more information on additional Toshiba worldwide locations, please visit: www.toshiba.co.jp/index.htm.

Appendix A

TOSHIBA Function Keys

TOSHIBA Function keys provide a quick way to modify selected system functions and to launch applications.

Functions

TOSHIBA Function keys are used to set or modify the following system functions:

- Help file
- Brightness control
- Output (Display switch)
- Touch pad
- Media
- Volume mute
- Wireless

Help file

This TOSHIBA Function key displays the help file.

Display brightness

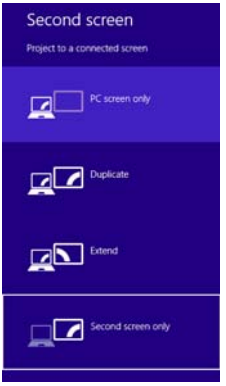
This TOSHIBA Function key decreases the screen brightness.

This TOSHIBA Function key increases the screen brightness.

Output (Display switch)

This TOSHIBA Function key cycles through the display options and highlights the available options, see "Directing the display output when you turn on the computer" on page 60.

- PC screen only
- Duplicate
- Extend
- Second screen only



(Sample Image) Display mode options window

NOTE All of the above modes are always displayed on the screen, however only the available modes for your system are functional, depending on the attached external display(s).

Disabling or enabling the touch pad

This TOSHIBA Function key enables/disables the touch pad.

To enable/disable the touch pad press F5.

For more information on using the touch pad, see "Using the touch pad" on page 55.

Media buttons

This TOSHIBA Function key allows you to restart playing the current track or go to the previous track.

This TOSHIBA Function key allows you to start playing or pause the media currently playing.

This TOSHIBA Function key allows you to go to the next track.

This TOSHIBA Function key decreases the volume.

This TOSHIBA Function key increases the volume.

Volume Mute

This TOSHIBA Function key enables/disables volume mute.

When volume mute is enabled, no sound will come from the speakers or headphones.

Disabling or enabling wireless devices

This TOSHIBA Function key enables/disables the Wi-Fi® antenna in your computer.

The wireless modes are:

- Disables the wireless antenna (Airplane mode is ON).
- Enables the wireless antenna (Airplane mode is OFF).

Appendix B

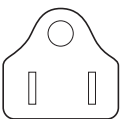
Power Cord/Cable Connectors

Your computer ships with the correct power supply for the country of purchase. This appendix shows the shapes of the typical AC power cord/cable connectors for various parts of the world.

USA

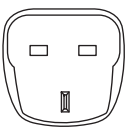
UL approved

Canada



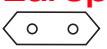
CSA approved

United Kingdom



BS approved

Europe



VDA approved
NEMKO approved

Australia

AS approved

Glossary

TECHNICAL NOTE: Some features defined in this glossary may not be available on your computer.

Acronyms

The following acronyms may appear in this User's Guide.

AC	Alternating Current
BIOS	Basic Input/Output System
BD-ROM	Blu-ray Disc Read-Only Memory
bps	bits per second
CD	Compact Disc
CD-ROM	Compact Disc Read-Only Memory
CD-RW	Compact Disc Rewrite Memory
CMOS	Complementary Metal-Oxide Semiconductor
CPU	Central Processing Unit
DC	Direct Current
DMA	Direct Memory Access
DIMM	Dual Inline Memory Module
DOS	Disk Operating System

DPI	Dots Per Inch
DVD	Digital Versatile (or Video) Disc
DVD-ROM	Digital Versatile (or Video) Disc Read-Only Memory
eSATA	external Serial Advanced Technology Attachment
FAT	File Allocation Table
FCC	Federal Communications Commission
GB	gigabyte
GBps	gigabytes per second
HDD	Hard Disk Drive
HDMI	High-Definition Multimedia Interface
HDMI CEC	High-Definition Multimedia Interface Consumer Electronics Control
HTML	Hypertext Markup Language
IEEE	Institute of Electrical and Electronics Engineers
I/O	Input/Output
IRQ	interrupt request
ISP	Internet Service Provider
KB	kilobyte
LAN	Local Area Network
LCD	Liquid Crystal Display
LED	Light Emitting Diode
MB	megabyte
MBps	megabytes per second
MIDI	Musical Instrument Digital Interface
PC	Personal Computer
PCI	Peripheral Component Interconnect
PCMCIA	Personal Computer Memory Card International Association
RAM	Random Access Memory
RGB	Red, Green Blue light (monitor)

RFI	Radio Frequency Interference
ROM	Read-Only Memory
RTC	Real-Time Clock
SD	Secure Digital
SDRAM	Synchronous Dynamic Random Access Memory
SSD	Solid State Drive
TFT	Thin Film Transistor
USB	Universal Serial Bus
URL	Uniform Resource Locator
WAN	Wide Area Network
www	World Wide Web

Terms

The following terms may appear in this User's Guide.

A

active-matrix display—A liquid crystal display (LCD) made from an array of liquid crystal cells using active-matrix technology. Also known as a "TFT display," in its simplest form there is one thin film transistor (TFT) for each cell. This type of display works well with computers because of its shallow depth and high-quality color. Active-matrix displays are viewable from wider angles than most passive-matrix displays.

adapter—A device that provides a compatible connection between two units. For example, the computer's internal display adapter receives information from the software and translates it into images on the screen. An adapter can take a number of forms, from a microprocessor to a simple connector. An intelligent adapter (one that is capable of doing some processing) may also be called a controller.

Alternating Current (AC)—The type of power usually supplied to residential and commercial wall outlets. AC reverses its direction at regular intervals. Compare *Direct Current (DC)*.

application—A computer program that you use to perform tasks of a specific type. Applications include word processors, spreadsheets, and database management systems. See also *program*.

B

backup—A copy of a file, usually on a removable disk, kept in case the original file is lost or damaged.

Basic Input/Output System (BIOS)—See *BIOS*.

baud rate—The speed at which a communication device, such as a printer or modem, transmits information. Baud rate is the number of signal changes per second (not necessarily the same as bits per second). See also *bits per second*.

Blu-ray Disc (BD)—Offering more storage capacity than DVDs, the format was developed to allow for more data storage and to enable recording and playback of high-definition video (HD).

BIOS (Basic Input/Output System)—Basic instructions, stored in read-only memory (ROM), containing the information the computer needs to check hardware and load the operating system when you start up the computer.

bits per second (bps)—A way of measuring the speed at which information is passed between two devices. This is the basic unit of measure used in modem communications, and is similar, but not identical, to the baud rate. See also *baud rate*.

boot—To start the computer. The term "boot" originates from bootstrap program (as in "pulling itself up by its bootstraps"), a program that loads and initializes the operating system. See also *reboot*.

boot disk—See *system disk*.

boot priority (startup sequence)—The order in which the computer accesses its internal storage drives to locate the startup files. Under the default startup sequence, the computer looks for the startup files in the external media before checking the internal storage drive.

bus—An electrical circuit that connects the central processing unit (CPU) with other parts of the computer, such as the video adapter, disk drives, and ports. It is the pathway through which data flows from one device to another. See also *bus speed, frontside bus*.

bus speed—The speed at which the central processing unit (CPU) communicates with the other parts of the computer.

C

cache—A section of very fast memory in which frequently used information is duplicated for quick access. Accessing data from cache is faster than accessing it from the computer's main memory. See also *CPU cache, L1 cache, L2 cache*.

CD—An individual compact disc. See also *CD-ROM*.

CD-ROM (Compact Disc Read-Only Memory)—A form of high-capacity storage that uses laser optics instead of magnetic means for reading data. See also *CD*. Compare *DVD-ROM*.

Central Processing Unit (CPU)—The chip that functions as the "brain" of the computer. It takes information from outside sources, such as memory or keyboard input, processes the information, and sends the results to another device that uses the information.

character—Any letter, number, or symbol you can use on the computer. Some characters are non-printing characters, such as a paragraph break in a word-processing program. A character occupies one byte of computer storage.

Charm/charms—Start screen icons that slide out from the right side of the screen and direct you to various Windows® functions.

chip—A small piece of silicon containing computer logic and circuits for processing, memory, input/output, and/or control functions. Chips are mounted on printed circuit boards.

click—To press and release the pointing device's primary button without moving the pointing device. In the Windows® operating system, this refers to the pointing device's left button, unless otherwise stated. See also *double-click*.

color palette—A set of specified colors that establishes the colors that can be displayed on the screen at a particular time.

compatibility—The extent to which computers, programs, or devices can work together harmoniously, using the same commands, formats, or language as another.

configuration—(1) The collection of components that make up a single computer system. (2) How parts of the system are set up (that is, configured).

controller—A device that controls the transfer of data from a computer to a peripheral device and vice versa. For example, disk drives, monitors, keyboards, and printers all require controllers.

CPU—See *Central Processing Unit (CPU)*.

CPU cache—A section of very fast memory residing between the CPU and the computer's main memory that temporarily stores data and instructions the CPU will need to execute commands and programs. See also *cache, L1 cache, L2 cache*.

cursor—An on-screen symbol (usually a flashing vertical line) that indicates the position where characters will appear when you enter data.

D

Desktop—Offers the traditional look and feel of the Windows® desktop found in Windows® 7 and earlier releases of the Windows® operating system.

default—The setting selected by a program when the user does not specify an alternative setting.

device—A component attached to the computer. Devices may be external (outside the computer's case) or internal (inside the computer's case). Printers, disk drives, and modems are examples of devices.

device driver—A program (called a "driver") that permits a computer to communicate with a device.

dialog box—An on-screen window displayed by the operating system or a program giving a direction or requesting input from the user.

Direct Current (DC)—The type of power usually supplied by batteries. DC flows in one direction. Compare *Alternating Current (AC)*.

Direct Memory Access (DMA)—A dedicated channel, bypassing the CPU, that enables direct data transfer between memory and a device.

directory—See *folder*.

disable—To turn a computer option off. See also *enable*.

disc—A round, flat piece of material, designed to be read from and written to by optical (laser) technology, and used in the production of optical discs, such as CDs and DVDs. Compare *disk*.

disk—A round, flat piece of material that can be magnetically influenced to hold information in digital form, and used in the production of magnetic disks, such as hard disks. Compare *disc*. See also *hard disk*.

disk drive—The device that reads and writes information and programs on external media or hard disk. It rotates the disk at high speed past one or more read/write heads.

document—Any file created with an application and, if saved to disk, given a name by which it can be retrieved. See also *file*.

double-click—To press and release the pointing device's primary button rapidly twice without moving the pointing device. In the Windows® operating system, this refers to the pointing device's left button, unless otherwise stated.

download—(1) In communications, to receive a file from another computer through a modem or network. (2) To send font data from the computer to a printer. See also *upload*.

drag—To hold down the mouse button while moving the pointer to drag a selected object. In the Windows® operating system, this refers to the left mouse button, unless otherwise stated.

driver—See *device driver*.

DVD—An individual digital versatile (or video) disc. See also *DVD-ROM*.

DVD-ROM (Digital Versatile [or Video] Disc Read-Only Memory)—A very high-capacity storage medium that uses laser optics for reading data. Each DVD-ROM can hold as much data as several CD-ROMs. Compare *CD-ROM*.

E

emulation—A technique in which a device or program imitates another device or program.

enable—To turn on a computer option. See also *disable*.

eSATA—An external device that supports hot swapping and fast data transfer. Very useful in storing and transferring large files.

executable file—A computer program that is ready to run. Application programs and batch files are examples of executable files. Names of executable files usually end with a .bat or .exe extension.

expansion device—A device that connects to a computer to expand its capabilities. Other names for an expansion device are port expander, port replicator, docking station, or network adapter.

extension—See *file extension*.

external device—See *device*.

F

file—A collection of related information, saved on disk with a unique name. A file may be a program, information used by a program, or a document. See also *document*.

File Allocation Table (FAT)—The section of a storage drive that keeps track of the location of stored files.

file name—A set of characters that uniquely identifies a file within a particular folder. It consists of two parts: the actual name and the file name extension. See also *file extension*.

file extension—The three characters following the period (pronounced "dot") at the end of a file name. The extension indicates the type of file. Examples are .exe for program files and .hlp for help files. See also *file name*.

folder—Also called directory. A container for organizing files saved to a disk. A folder is symbolized on screen by a graphical image (icon) of a file folder. A folder can contain files and other folders.

format—(verb) To prepare a blank disk for use with the computer's operating system. Formatting creates a structure on the disk so the operating system can write information to the disk or read information from it.

frontside bus—The primary pathway (bus) between the CPU and the computer's main memory. Also called "system bus." See also *bus*.

Function key—(1) A feature in which certain keys in combination with the Fn key can set system options or control system parameters, such as the battery save mode. (2) A key or combination of keys that activates a memory resident program.

function keys—The keys labeled F1 through F12, typically located on the keyboard. Their function is determined by the operating system and/or individual programs.

G

ground—A conductor to which all components of an electric circuit are connected. It has a potential of zero (0) volts, is connected to the earth, and is the point of reference for voltages in the circuit.

H

hard disk—A storage device composed of a rigid platter or platters that can be magnetically coded with data. Hard disks hold much more information than some external media and are used for long-term storage of programs and data. The primary (or only) hard disk in a computer is usually fixed, but some computers have secondary hard disks that are removable.

hardware—The physical components of a computer system. Compare *software*.

HDMI (High-Definition Multimedia Interface)—An interface used to transmit high quality audio and video signal via a single cable in digital format, providing better picture quality than analog signal.

HDMI-CEC (HDMI Consumer Electronics Control)—One A/V component can control another while using this function, if connected with HDMI cables. See also *HDMI*.

Hibernation—A feature of many Toshiba computers that saves to the internal storage drive the current state of your work, including all open files and programs, when you turn the computer off. When you turn on the computer again, your work is returned to the same state it was when the computer was turned off. See also *Sleep*, *Suspend*.

hot swapping—The ability to add or remove devices from a computer while the computer is running and have the operating system automatically recognize the change.

I

icon—A small image displayed on the screen that represents a function, file, or program.

interlaced—A method of refreshing a computer screen, in which only every other line of pixels is refreshed. Interlaced monitors take two passes to create a complete screen image. Compare *non-interlaced*.

internal device—See *device*.

Internet—The decentralized, world-wide network of computers that provides electronic mail, the World Wide Web, and other services. See also *World Wide Web*.

K

keyboard shortcut—A key or combination of keys that you use to perform a task instead of using a pointing device such as a mouse.

L

L1 (level one) cache—Memory cache built into the processor to help improve processing speed. See also *cache, CPU cache, L2 cache*.

L2 (level two) cache—Memory cache installed on the motherboard to help improve processing speed. It is slower than L1 cache and faster than main memory. See also *cache, CPU cache, L1 cache*.

LAN (Local Area Network)—A group of computers or other devices dispersed over a relatively limited area and connected by a communications link that enables any device to interact with any other on the network.

LED (Light Emitting Diode)—A solid state lamp (SSL) that uses light-emitting diodes (LEDs) as the source of light, which offers long life and high efficiency output. Multiple diodes are used together, since the light created by individual light-emitting diodes is small compared to incandescent and compact fluorescent lamps.

LCD (Liquid Crystal Display)—A type of display that uses a liquid substance between two transparent electrode panels. When an electric current passes through the electrodes, the molecules in the liquid form a crystalline pattern that polarizes the light passing through it. A filter over the electrodes permits only non-polarized light to pass to the surface of the display, creating light and dark pixels.

load—To move information from a storage device (such as a hard disk) into memory for processing.

local area network—See *LAN*.

logical drive—A section of a disk that is recognized by the operating system as a separate disk drive. A system's logical drives may differ from its physical drives. For example, a single hard disk drive may be partitioned into two or more logical drives.

M

memory—Typically refers to the computer's main memory, where programs are run and data is temporarily stored and processed. Memory can be volatile and hold data temporarily, such as RAM, or it can be non-volatile and hold data permanently, such as ROM. A computer's main memory is RAM. See also *RAM, ROM*.

microprocessor—See *Central Processing Unit (CPU)*.

MIDI (Musical Instrument Digital Interface)—A standard for connecting musical instruments, synthesizers, and computers. The MIDI standard provides a way of translating music into a form computers can use, and vice versa.

motherboard—The computer's main circuit board that contains the processor, memory, and other primary components.

MS-DOS prompt—See *system prompt*.

multi-function drive—A DVD drive that can read and write to CD and DVD media.

multimedia—A combination of two or more media, such as sound, animation, and video in a computer program or presentation.

Musical Instrument Digital Interface—See *MIDI*.

N

network—A collection of computers and associated devices that are connected by communications facilities. A network allows you to share data and peripheral devices, such as printers, with other users and to exchange electronic mail.

non-interlaced—A method of refreshing a computer screen, in which each pixel of every line is refreshed as the electron beam scans across and down the screen. Compare *interlaced*.

non-system disk—A disk for storing programs and data that cannot be used to start the computer. Compare *system disk*.

O

online—Available through the computer. Online may refer to information being read from your own computer's internal storage drive, such as online documentation or online Help, or to information coming from another company on a company network or the Internet.

operating system—A set of programs that controls how the computer works. Examples of operating systems are the Windows Vista®, Windows® 7, and Windows 8 operating systems.

optical disc drive—A drive which reads plastic coated discs on which information is recorded digitally, and uses a laser to read data, music, or videos.

P

palette—See *color palette*.

password—A unique string of characters entered by a user to verify his or her identity to the computer or the network.

PC Card—A credit-card-sized expansion card designed to increase the capabilities of computers. PC Cards provide functions such as modem, fax/modem, hard disk drive, network adapter, sound card, or SCSI adapter.

peripheral—Any device, such as a printer or joystick, that is attached to the computer and controlled by the computer's CPU.

pixel—Short for "picture element." The smallest dot that can be produced on a screen or printer.

Plug and Play—Generally, refers to the computer's ability to automatically configure itself to work with peripheral devices. When capitalized, refers to a standard that, when followed by a device manufacturer, allows a computer to configure itself automatically to work with the device.

pointer—An icon (usually an arrow) that moves on the screen when you slide your finger across the touch pad or move a mouse. Used to point to and select/activate on-screen items, such as icons, menu items, and buttons. The shape and purpose of the pointer varies depending on the program you are using and what you are doing.

pointing device—Any device, such as the touch pad or a mouse, that enables you to move the pointer on the screen.

port—A socket on the computer where you plug in a cable for connection to a network or a peripheral device.

processor—See *Central Processing Unit (CPU)*.

program—A set of instructions that can be executed by a computer. The general classes of programs (also called software) are operating system, application, and utility. See also *operating system, application, utility.*

properties—The attributes of an object or device. For example, the properties of a file include the file's type, size, and creation date.

R

RAM (Random Access Memory)—*Volatile* memory that can be written to as well as read. *Volatile* here means that information in RAM is lost when you turn off your computer. This type of memory is used for your computer's main memory. See also *memory.* Compare *ROM*.

Random Access Memory—See *RAM*.

Read-Only Memory—See *ROM*.

reboot—See *boot, restart*.

removable disk—A disk that can be removed from a disk drive. A Flash drive is one example of a removable disk.

resolution—A measure of the sharpness of the images that can be produced by a printer or displayed on a screen. For a printer, resolution is expressed in dots per inch (dpi). For a screen, it is expressed as the number of pixels available horizontally and vertically.

restart—Synonymous with reboot. To reset the computer by reloading the operating system without turning the computer off. See also *boot*.

RGB (Red, Green, Blue) monitor—A monitor that reproduces all colors by mixing red, green, and blue light in various combinations.

RJ45 connector—An eight-wire connector used to connect a computer to a network.

ROM (Read-Only Memory)—Non-volatile memory that can be read but not written to. *Non-volatile* here means that information in ROM remains whether or not the computer is receiving power. This type of memory is used to store your computer's BIOS, which is essential instructions the computer reads when you start it up. See also *BIOS, memory.* Compare *RAM*.

S

Secure Digital (SD)—A small, portable, non-volatile memory card used to store and transfer data between digital products, providing encryption capability for content security.

select—To highlight or otherwise specify text, data, or graphics with the intent to perform some operation on it.

shortcut—See *keyboard shortcut*.

Sleep—A feature of some Windows® operating systems that allows you to turn off the computer without exiting your open applications and to continue from where you left off when you turn the computer on again.

software—See *program*. Compare *hardware*.

solid state drive—A data storage device that utilizes solid-state memory as opposed to a hard disk (see also *hard disk*). Solid state drives hold a large amount of information and are used for storage of programs and data.

Start screen—Displays the new Windows® operating system look and feel.

Suspend—A feature of some Windows® operating systems that allows you to turn off the computer without exiting your open applications and to continue from where you left off when you turn the computer on again.

Swipe—Swipe an open window to the left or right of the screen to display the next or previous window.

system prompt—The symbol (in the MS-DOS® operating system, generally a drive letter followed by a "greater than" sign) indicating where users are to enter commands.

T

TFT display—See *active-matrix display*.

Touch—To activate items displayed on the screen, such as apps, setting icons, and on-screen buttons by touching them with your finger.

Tile/Tiles—A list of square or rectangular icons on the Start screen representing applications that can be accessed by selecting them.

U

Universal Serial Bus (USB)—USB is a serial bus that supports data transfer. USB allows hot swapping of peripherals. See also *bus, hot swapping, serial*.

upload—To send a file to another computer through a modem or network. See also *download*.

USB—See *Universal Serial Bus (USB)*.

USB Flash drive—A small, portable flash memory card that plugs into a computer's USB port and functions as a portable hard drive. They are smaller and more durable than an external hard drive because they do not contain any internal moving parts, but have less storage capacity. See also *Universal Serial Bus (USB)*.

utility—A computer program designed to perform a narrowly focused operation or solve a specific problem. Utilities are often related to computer system management.

W

Web—See *World Wide Web*.

Wi-Fi®—A registered trademark term of the Wi-Fi Alliance that stands for Wireless Fidelity, and is another term for the communication protocol to permit an Ethernet connection using wireless communication components.

World Wide Web (www)—The worldwide network of Web sites linked together over the Internet. A user of the Web can jump from site to site regardless of the location of the computer hosting the site. See also *Internet*.

Index

A

AC adaptor 38
AC power 75
AC power light 38
    indicator light 78
accessing
    network 92
adding
    memory 44
    optional external devices 43
adequate ventilation
    cooling fan 37
adjusting
    touch pad settings 57
Advanced Startup options 113
app, starting 70
App, starting from Start screen 71
apps
    starting from Start screen 71
audio features 92

B

backing up files 65, 72
battery
    battery life 74
    care 83, 84
    changing 83
    charge indicator light 39
    charge time 75
    charger 75
    charging 39, 75
    charging the real-time clock (RTC) 76
    conserving power 80
    determine remaining power 78
    indicator light 78
    low charge 79
    maintaining 84
    maximum capacity 74
    monitoring power 39, 77
    power management 75
    power options 79
    real-time clock (RTC) 75
    recharge time 74
    RTC memory 75
    running computer on battery power 73
    safety precautions 83
    setting notifications 79

taking care of 83
battery indicator light 78
BIOS Setup
see System Settings

C

caring for your computer 61
changing
battery 83
charging the battery 39
cleaning the computer 62
communications
set up 91
computer
caring for 61
cleaning 62
disposal 84
environmental precautions 29, 84
moving 62
running on battery power 73
setting up 37
computer lock 62
computer will not start
troubleshooting 110
computing habits
troubleshooting 125
computing tips 64
connecting
AC adaptor 38
AC adaptor cord to (DC-IN) 39
computer to a network 92
external device 58
HDMI™-compatible TV or display device 59
power cord/cable 39
power source 38
cooling fan
adequate ventilation 37
customize
computer settings 61

D

data/entire system backup
troubleshooting 128
desktop
creating new icon 89
exploring the 88
icons 89
recycle bin 89
standard features 87, 88
Device Manager
fixing a problem 116
directing
display output 60
disabling
touch pad 58
display
troubleshooting 120
display configuration modes 66
display devices
external 59
display output settings 60
display, external
adjusting 61
disposal information 18
disposing of your computer 84
documentation 28

E

eco power plan 82
eco Utility® 98
enabling
touch pad 58
enabling/disabling touch pad 136
ENERGY STAR® 24
exploring
desktop 88
Start screen 86
external display, adjusting 61

F

files
backing up 65, 72
saving 71

Function Key 106
Function Keys
disabling or enabling wireless devices 137
Function keys 136
display brightness 134
Help file 134
media buttons 136
Output (Display switch) 135
volume mute 137
function keys 68

H

headphones
using 93

I

icon
desktop 89
moving to desktop 89
recycle bin 89
safety 27
Shut down 42, 43
Initial setup
using your computer for the first time 40
internal storage drive
recovery 44

K

keyboard
function keys 68
special Windows® keys 68
troubleshooting 119
using 67
keys
function keys 68

L

LEDs
system indicator lights 78
AC adaptor light 77
AC power light 38, 39
battery light 39
Web Camera light 94
Licenses 17
lock
computer, using 62

M

maintaining your battery 84
memory
adding 44
Memory card reader
inserting memory media 95
removing memory media 95
using 94
microphone
using 92
monitor problems
troubleshooting 119
monitoring battery power 77
mouse properties 70
moving the computer 62

N

network
accessing 92
connecting your computer 92
networking
wireless 91
notification area 90
notifications 90

O

ON/OFF 78
ON/OFF indicator light 78
online resources
Toshiba 72
optional external devices
adding 43

P

password
deleting a supervisor 101
deleting a user 103
instant password 99
power-on password 99
setting 99
setting a supervisor 99

setting a user 101
supervisor password 99
user password 99
utility 99
port
HDMI™ Out 59
Micro HDMI™ Out 59
power
connecting cable to AC adaptor 38
cord/cable 39
cord/cable connectors 138
energy-saving features 73
power down
shut down 41
power management 75
optimum performance 75
power plans
selecting power plan options 81
power saving options 80
precautions
safety 35
printer
troubleshooting 123
problem solving
contacting Toshiba 131
Startup options 113

R

real-time clock (RTC)
battery 75
recording sounds 92
recovery
creating recovery media 45
installing drivers and applications 54
internal storage drive 44
refresh your PC 49
reset your PC 51
restoring from recovery media 48
Recovery Media Creator 107
recycle bin icon 89
refresh your PC
with user's data 49
registering computer 41
restart computer 42
restore points
troubleshooting 126
running computer on battery power 73

S

safety
computer 84
disposing of computer 84
icons 27
precautions 35
safety precautions
battery 83
saving files 71
screen
Auto-rotation 67
selecting
a place to work 29
power plan options 81
video cables 59
Service Station 107
setting
low battery notifications 79
setting up
AC adaptor 38
communications 91
computer 37
software 40
work environment 29
settings
customize computer settings 61
display output 60
Shut down
computer 42, 43
icon 42, 43

Sleep mode 43
sounds
recording 92
speakers
using external 93
Start screen
exploring the 86
starting an app 70
starting an app from Start screen 71
Startup menu
problem solving 113
supervisor password, deleting 101
supervisor password, set up 99
system indicator lights
AC power 38
LEDs 39, 77, 78, 94
System Settings 104

T

taking care of battery 83
taskbar 89
television
adjusting display 61
Tiles
Start screen 88
tips
for computing 64
Toshiba
online resources 72
registering computer
Toshiba Web site 41
worldwide offices 132
TOSHIBA Application Installer 108
TOSHIBA Function Keys
functions 133
touch pad
using 55
touch screen navigation 69
traveling tips 84
troubleshooting 119
AC power light is blinking 111
battery light is blinking 112
bookmarked site not found 115
checking device properties 116
computer will not start 110
contacting Toshiba 130
corrupted/damaged data files 122
data/entire system backup 128
Device Manager 116
display error message 120
display problems
screen is blank 119
error message, warning
resume failure 111
Error-checking 121
external display problems 120
external keyboard 119
external monitor 119
good computing habits 125
hard disk drive is slow 122
high-pitched noise 123
installing hardware/software 129
keyboard 119
missing files/trouble accessing a drive 121
power and battery 117
printer 123
restore points 126
screen does not look correct/ flickers 120
slow Internet connection 115
sound system 122
trouble running programs 122
URL address not found 115
Windows® operating system not working 112
wireless networking 124

U

user password, deleting 103
user password, setting 101
using
a microphone 92
computer lock 62

eco power plan 82
Memory card reader 94
touch pad 55
Web Camera 94
using the keyboard 67
Utilities 97

V

video projector
adjusting display 61

W

warranty
standard limited warranty 28
Web Camera
using 94
Web sites 131
Wi-Fi®
wireless networking 91
Windows® Charms
Devices 87
Search 87
Settings 87
Share 87
Start 87
Windows® charms 87
Windows® key 68
Windows® operating system
desktop 88, 95
troubleshooting 112
Windows® Store 90
wireless networking 91
troubleshooting 124